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INFLUENCES OF GRAZING MANAGEMENT SYSTEMS
ON VEGETATION AND WILDLIFE HABITAT

1975 AND 1979 RESULTS
AND
LONG-TERM SUMMARY

SUBMITTED BY THE WYOMING AGRICULTURAL EXPERIMENT STATION

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INFLUENCES OF GRAZING MANAGEMENT SYSTEMS
ON VEGETATION AND WILDLIFE HABITAT^{1/}

1975 AND 1979 RESULTS AND LONG-TERM SUMMARY

By

H. G. Fisser, D. E. Rodgers and W. E. Gerhart^{2/}Table of Contents

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INTRODUCTION

A grazing systems study was initiated in 1967 to determine the effects on vegetation and wildlife habitat. The project was a joint undertaking by the Wyoming Agricultural Experiment Station and the Bureau of Land Management, and is ongoing in nature. It is a unique study in that it has been conducted under actual ranching conditions, rather than as an experiment with strict controls. Such an approach is advantageous because it presents an opportunity to evaluate grazing systems theory as it applies in a "real life situation".

Rotational, deferred, and continuous grazing systems were implemented to determine their relative effects on vegetative trend in cover and composition. Data was collected annually from 1967-1971, and thereafter every four years, in 1975 and 1979. The following report includes a summary of that data collected in 1975 and 1979, along with an analysis of vegetation dynamics over the entire 12 year study period.

DESCRIPTION OF THE STUDY AREA

The study site is located on the southeastern edge of Wyoming's Red Desert, just west of the town of Baggs, near the Colorado-Wyoming border. Elevation of the area ranges from 6,200 - 7,000 feet. The overall climate is characterized by long, cold winters and short, hot summers, with an average growing season of 96 days. Average annual precipitation over the study area for the 1967-1979 period was 9.18 inches.

The geology of the area is characterized mainly by a system of anticlines and synclines, which dip and rise in a north-south fashion. The resulting topography consists of long, gentle rises along with steep breaks, cliffs, and high ridges. Soil parent materials are primarily derived from shale, sandstone, and limestone. Alluvial deposits found on the area represent a mixture of these sedimentary types. Soil types range from pale to dark brown loams and sandy loams that are often calcareous. Some sites are fairly alkaline, with pH values ranging from 8.3 to 9.1. Clay soils are also found in the area, along with a few other minor types. Complete descriptions of soils on the study area have been provided in an earlier report (Fisser and Gibbens, 1971).

Vegetation on the study area is somewhat variable, being a direct product of soil types, climate, and topography. Steep hillsides and breaks are typically covered by Utah juniper (Juniperus osteosperma), while on lower, more level areas, sagebrush-grass communities tend to predominate. Vegetation types dominated by big sagebrush (Artemisia tridentata) are the most extensive. Subdominants found in association with big sagebrush include western wheatgrass (Agropyron smithii), Sandberg bluegrass (Poa secunda), mutton bluegrass (Poa fendleriana), bluebunch wheatgrass (Agropyron spicatum), prairie junegrass (Koeleria cristata), Indian ricegrass (Oryzopsis hymenoides), needleandthread (Stipa comata), and a wide variety of forbs. Common sixweeks fescue (Festuca octoflora) and cheatgrass (Bromus tectorum) are of local importance. Sites dominated by Utah juniper usually include such understory shrub species as true mountain-mahogany (Cercocarpus montanus), black sagebrush (Artemisia nova), antelope bitterbrush (Purshia tridentata); on some sites

though, shrub understory is quite sparse. Cover values for grasses and forbs are low in most of the juniper stands.

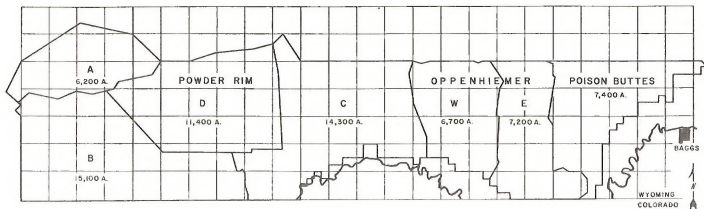
Some sites are dominated by a perennial grass such as western wheatgrass or needleandthread, or by a combination of perennial grasses. Bluebunch wheatgrass is sometimes the community dominant near the crests of high rims. Other small communities are dominated by black greasewood (Sarcobatus vermiculatus), bud sagewort (Artemisia spinescens), Nuttall saltbush (Atriplex gardneri), shadscale saltbush (Atriplex confertifolia), and winterfat (Eurotia lanata).

Plant species from the area have been collected and identified since 1967. The total number of species now stands at 272, with 40 families represented (Appendix D). Codes for designation of plant species are listed in Appendix E.

METHODS AND PROCEDURES

The study site is 68,362 acres in size and is divided into a four-pasture rest-rotational grazing unit (Powder Rim allotment), a two-pasture deferred grazing unit (Oppenhiemer allotment), and a season-long grazing unit (Poison Buttes allotment). Grazing schedules for the allotments were established in 1965 when fence construction was completed on the area. The rest-rotation schedule on the Powder Rim system, however, was revised in 1968 to permit a more equitable distribution among operators. The current schedules along with a map of the study area are shown in Figures 1 and 2.

In 1966 the stocking rate on all pastures was cut by approximately 25% in order to ease grazing pressure on an already-depleted range. Also,



GRAZING SCHEDULE

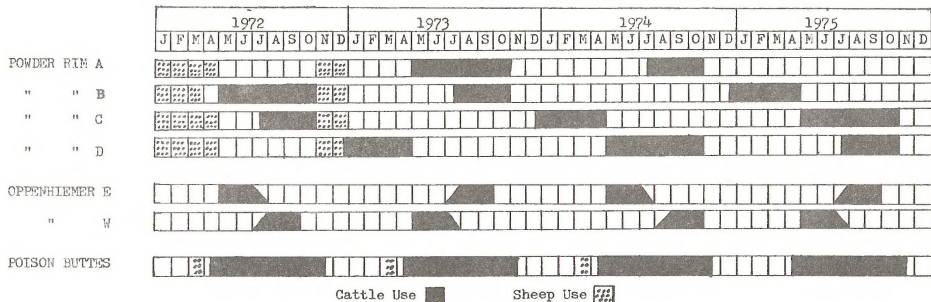


Figure 1. Map of the Baggs study area showing grazing units and approximate acreages. Grazing schedules for each unit are shown in the diagram below. A complete cycle for the rest-rotation system was completed at the end of the 1971 season and the 1975 season.

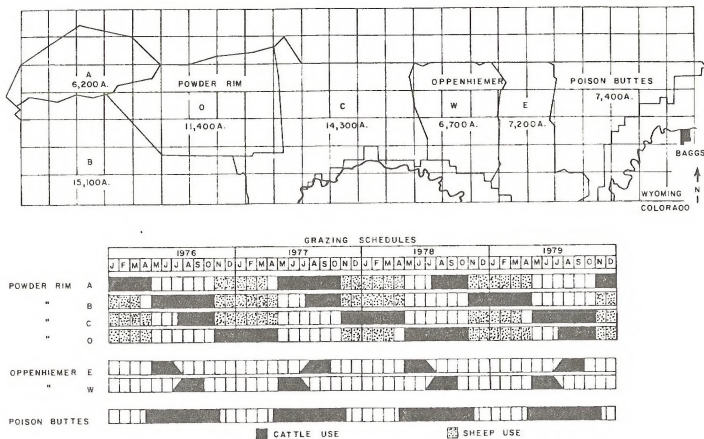


Figure 2. Map of the Baggs study area showing grazing units and approximate acreages. Grazing schedules for each unit are shown in the diagram below. The third complete cycle for the rest-rotation system was completed at the end of the 1979 season.

stocking rates were adjusted according to range condition and pasture size, so that grazing pressure would be comparable on the three units. Allowable use and actual use figures for the 1966-1979 period are given in Table 1.

Livestock exclosures were constructed on each pasture in 1967 to help determine the effects of grazing on the vegetation. Also, big game exclosures were built in the juniper type on the Poison Buttes pasture and on Powder Rim, Pasture B. On several sites in each pasture, and at three exclosure locations, big sagebrush was sprayed to evaluate subsequent regrowth and animal use. Detailed descriptions of the exclosures are given in a previous report (Gibbons et al., 1968).

Precipitation data was collected at all exclosure locations since 1967. Twelve-year averages have been calculated for each location, as well as yearly averages (Table 2). Seasonal precipitation data for the 1972-1979 period are included in Appendix H.

Cover and composition of vegetation were determined on 63 permanent plot transects located on the various pastures, and on 32 permanent plot transects located inside and outside of exclosures. Twenty pasture transects were placed in close proximity to BLM trend plots so that trend evaluation methods could be compared. Transects were 100 feet long, with twenty 1' x 1' quadrats located systematically along the line (one every five feet). Cover values were estimated for all plant species inside quadrats, and then average cover for each plant species on a transect was determined. Litter, bare ground, and rock cover values were also estimated (1979 only). Close-up and general view photographs were taken at each transect starting point. Summarized data from exclosure transects, along with locations and descriptions of the exclosures, are included in Appendix B. Data summaries for pasture transects are presented in Appendix A, with transect locations listed in Appendix F.

TABLE 1. Allowable AUM's as determined by the BLM for cattle and sheep, and 'actual use' of AUM's on the three allotments in the grazing systems study area.

Allotment	Allowable AUM's	1966	1967	Actual use AUM's by year					
				1968	1969	1970	1971	1972	
Poison Buttes									
Cattle	663 (increased to 737 in 1968)	627	627	755	755	745	745	754	
Sheep	124	136	136	136	124	124	124	124	
Total	787 (861)	763	763	891	879	869	869	878	
Oppenhiemer									
Cattle	1086	1086	1086	1086	1086	1086	502	1083	
Powder Rim									
Cattle	2229	1944	1944	1860	2022	2049	2174	2067	
Sheep	4326	3670	2311	4141	3948	3014	2414	1934	
Total	6555	5614	4255	6001	5970	5063	4588	4001	

TABLE 1. Allowable AUM's as determined by the BLM for cattle and sheep, and 'actual use' of AUM's on the (cont.) three allotments in the grazing systems study area.

Allotment	Allowable AUM's	1973	1974	Actual use AUM's by year			1978	1979
				1975	1976	1977		
Poison Buttes								
Cattle	734	754	754	754	734	605	608	734
Sheep	0	124	124	0	0	0	0	0
Horses	20	0	0	0	20	20	0	20
Total	754	878	878	754	754	754	608	754
Oppenhiemer								
Cattle	1080	270	555	1080	? ¹	0	432	0
Powder Rim								
Cattle	3866 ²	2822	2904	2334	3864	2000	2612	2882
Sheep	2686	0	0	0	1027	1714	1467	1507
Total	6552	2822	2904	2334	4891	3714	4079	4389

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²The change in AUM's allowed came from a livestock conversion from sheep to cattle in 1973 (Stan Jolley).

Table 2. 1967-1979 Precipitation Records

Rain Gauge Number	Location: Pasture Enclosure	Total Oct. 1967 Oct. 1968	Total Oct. 1968 Oct. 1969	Total Oct. 1969 Oct. 1970	Total Oct. 1970 Oct. 1971	Total Oct. 1971 Oct. 1972	Total Oct. 1972 Oct. 1973
124	Poison Buttes Exc. I	10.69	11.99	10.83	10.51	11.77	13.0
125	Poison Buttes Exc. II	11.06	12.82	12.09	11.66	8.52	9.28
128	Oppenheimer Exc.	9.17	10.86	10.69	10.01	11.34	9.97
130	Powder Rim C Exc.	7.04	8.97	9.35	9.55	7.36	10.21
131	Powder Rim D Exc.	6.90	8.75	8.42	9.89	6.94	7.46
136	Powder Rim B Exc. I	8.19	9.17	9.46	10.41	8.02	8.67
137	Powder Rim B Exc. II	10.75	12.94	11.47	12.44	9.99	8.72
139	Powder Rim A Exc.	8.94	10.87	9.41	10.10	10.35	10.83
AVERAGE		8.38	10.36	9.49	10.09	9.29	9.89

$\frac{1}{E}$ = Estimated Reading

Table 2. 1967-1979 Precipitation Records (continued)

Rain Gauge Number	Location: Pasture Enclosure	Total Oct. 1973 Oct. 1974	Total Oct. 1974 Oct. 1975	Total Oct. 1975 Oct. 1976	Total Oct. 1976 Oct. 1977	Total Oct. 1977 Oct. 1978	Total Oct. 1978 Oct. 1979	Average Oct. 1967 Oct. 1979
124	Poison Buttes Exc. I	9.18	10.0	8.79	8.85	12.31	10.16	10.67
125	Poison Buttes Exc. II	11.74	11.48	9.68	8.45	12.36	12.21	10.95
128	Oppenhiemer Exc.	9.07	8.86	8.17	6.59	11.15	9.35	9.60
130	Powder Rim C Exc.	7.93	8.00	7.54	6.36	9.37	7.99	8.31
131	Powder Rim D Exc.	6.48	8.13	7.17	5.02	8.44	7.06	7.56
136	Powder Rim B Exc. I	8.14	8.43	E7.51	5.67	9.68	7.58	8.49
137	Powder Rim B Exc. II	11.23	9.74	9.60	6.69	9.07	10.44	10.26
139	Powder Rim A Exc.	6.01	9.19	8.43	4.92	10.28	10.63	9.16
AVERAGE		8.72	9.23	8.36	6.57	10.33	9.43	9.18

$\frac{1}{E}$ = Estimated Reading

In 1967 combination belt and line-point transects were established in the juniper-shrub types to evaluate trend in browse cover, density, and productivity. Browse species are an important food source for mule deer wintering in the area. Unfortunately, the original transects could not be re-located in 1975. New transects were thus established that year in each pasture and permanently marked with steel rods at the 0, 100, and 200 foot locations. Sampling data was taken from a combination belt, line-point, and permanently marked 1' x 1' quadrats. The twenty 1-ft² plots (one every ten feet) provided estimates of vegetative cover as described earlier, as well as bare ground, rock, litter, and debris. Point canopy coverage of vegetation was also recorded at 1-ft intervals along the 200-ft tape. Shrub and tree densities, along with age class, were recorded in a 10-ft belt strip, with 5 feet on each side of the tape. Photographs were taken at each transect starting point. Browse transect data are summarized in Appendix C and transect locations are described in Appendix G. Since these transects were selectively located in areas supporting good stands of certain browse species, they are not intended to be a true representation of the juniper type.

Utilization of all forage types was measured annually from 1967-1971. Utilization of the key forage species, western wheatgrass, was determined by the stem count method, while on other species, it was estimated (Gibbens et al., 1968). This type of data was not collected in either 1975 or 1979.

Qualitative data on wildlife numbers, activities, and distribution were recorded throughout each data collection period, in order to help evaluate the effects of the project on native fauna.

RESULTS AND DISCUSSION

Average percent cover values for all shrubs, grasses and forbs on the grazing units are given in Table 3. It is apparent from this data that total grass cover has shown a steady increase on all systems, while forb cover fails to show any significant trend. Shrub cover appears to have declined on all units since 1975, apparently because of winter kill.

Only those perennial grasses considered most important to grazing animals were used in the statistical analysis of grass cover data. Western wheatgrass, Indian ricegrass, needleandthread, and bluebunch wheatgrass cover values for 1967 and 1979 were totaled and analyzed. An analysis of variance of the difference between means showed that mean perennial grass cover has increased significantly at the .05 level on all three grazing systems since 1967. Mean cover values for western wheatgrass alone were then compared, as western wheatgrass is considered the key perennial forage species. No significant difference was found on any system between 1967 and 1979.

Perennial grass cover amounts of increase between 1967 and 1979 were then compared among pasture systems. An analysis of variance test showed no significant difference at the .05 level.

Certain factors thought to be confounding the analysis were investigated. Some transects on the area are paired with BLM trend plots. These plots were established under the "key area" monitoring system, meaning that: (1) they were placed with the intention of sampling all representative vegetation types on each unit, and (2) they were located on sites within these types where grazing pressure was considered to be moderate. As a result, there was a greater percentage of transects located on naturally unproductive sites on the Powder Rim system than on either of the other two systems.

TABLE 3. Average percent cover of shrubs, grasses, and forbs on the grazed trend transects within each grazing system for 1967, 1971, 1975 and 1979.

Grazing System (Pastures)	No. of Transects	Plant Group	Average % Cover			
			1967	1971	1975	1979
Season-long (Poison Buttes)	11	Shrub	10.28	9.53	10.38	9.35
		Grass	2.12	2.73	3.91	4.35
		Forb	1.62	0.64	0.93	1.40
Deferred (Oppenhiemer East & Oppenhiemer West)	18	Shrub	7.70	7.09	7.97	6.60
		Grass	1.11	1.65	2.79	2.30
		Forb	1.40	0.57	1.47	1.63
Rest-rotation (Powder Rim A, B, C, and D)	44	Shrub	9.53	9.46	10.08	7.04
		Grass	1.39	1.78	2.71	2.92
		Forb	1.47	0.23	0.90	1.03

These sites are characterized by highly alkaline soils, a dense juniper overstory, or both. Comparisons of pictures taken in 1967 and 1979 on these sites show little recovery of perennial grasses. It was thus decided to stratify transects for the statistical analysis according to site type. On each pasture system, only those transects located in the sagebrush-grass type were considered. Perennial grass cover amounts of increase were again compared among systems, and again no significant differences were found.

Utilization data from 1967-1971 seem to indicate an average utilization rate of 45-60% for western wheatgrass on all pastures. Other grasses were utilized less than 40% on the average, though Indian ricegrass and needleandthread were heavily used on a few locations.

Cover and frequency of occurrence for the perennial grasses analyzed seem to be reflective of the observed utilization rates. Western wheatgrass has increased in cover on a number of sites on each grazing system since 1967 (Table 4), but these increases were not statistically significant. Needleandthread, Indian ricegrass, and bluebunch wheatgrass have also shown cover gains (Table 4). Apparently these gains were more substantial than those of western wheatgrass, because total perennial grass cover increased significantly on all three grazing units. Average quadrat occurrences (frequency) for western wheatgrass have declined or remained unchanged on most pastures, while occurrences for needleandthread and Indian ricegrass have for the most part increased (Table 5). It can be concluded, then that total perennial grass cover gains are due mainly to needleandthread, Indian ricegrass, and to a lesser degree, bluebunch wheatgrass.

An analysis of variance of exclosure data showed significant increases in total perennial grass cover inside on 3 of 10 comparisons, while western wheatgrass increased inside on just 2 of 10 comparisons, at the .05 level.

TABLE 4. A comparison of the grazing systems based upon the number of grazed trend transects showing an increase or decrease in cover of grasses from 1967 to 1979.

Pasture	Total grass cover No. of sites with			Western wheatgrass No. of sites with			Indian ricegrass No. of sites with			Needleandthread No. of sites with			Bluebunch wheatgrass No. of sites with		
	Increase	No Loss	Change	Increase	No Loss	Change	Increase	No Loss	Change	Increase	No Loss	Change	Increase	No Loss	Change
Season - long (Poison Buttes)	9	1		9	1		3	2	5	8	2				10
Deferred (Oppenhiemer East & Oppenhiemer West)	15	1		10	5	1	10		6	6	2	8	1	1	14
Rest-rotation (Powder Rim A, B, C and D)	36	1		22	9	6	24	10	3	18	2	17	6	2	29
Total	60	3		41	15	7	37	12	14	32	4	27	7	3	53

Table 5. Changes in the average number of quadrat occurrences for perennial grasses and sedges on grazed trend transects within each pasture for 1967-1979 based upon twenty 1' x 1' quadrats per transect.

Species	Pasture Name and Number of Transects						
	Poison Buttes 10	Opp. East 8	Opp. West 8	Powder Rim A 10	Powder Rim B 10	Powder Rim C 7	Powder Rim D 10
Agsm	+1	-2	-2	0	0	0	-2
Agsp		+1	0	-1	0		
Cael	+1	+1		0	0	-1	-1
Cafi					+1		
Camo							
Hija					+1	0	
Kocr	0	0	0	0	+1		-1
Orhy	+1	0	+1	0	+3	+2	0
Pofe	-1	+1	0	0		0	-1
Pose	-3	-2	-2	+2	0	-1	+1
Sihy	-3	-1	-2	-1	0	-2	-1
Stco	+3	-1	+1	+1	0	+3	+1

Exclosures showing no differences were located either on unproductive sites (juniper overstory or alkaline soils, or on sites where grazing pressure appeared to be slight resulting in relatively uninhibited grass growth outside.

Data from exclosures in the juniper type show little in the way of discernible trends since 1967 (Table 6). Cover of Utah juniper appears to have increased inside, while decreasing outside on the Poison Buttes game exclosure. This could be due to wildlife use during the winter, or possibly to differences in cover estimations by different data collectors. Black sagebrush density appears to have declined substantially on the same exclosure, probably as a result of winter kill. Though utilization of browse species was noticeable outside of all these exclosures, it is apparent that recovery under protection has not been significant after 12 years.

EFFECTS ON WILDLIFE

A variety of wildlife species are found on the area. Big game animals found include pronghorn antelope and mule deer. Sage grouse are found in limited numbers, and mourning doves are a common summer resident. Migratory waterfowl are sometimes seen on both large and small ponds. A number of predators inhabit the area, including coyotes, badgers, bobcats, and a variety of raptors, including the golden eagle. A great variety of other wildlife species also occur, and particularly noticeable are several areas with substantial prairie dog populations. Snakes are also fairly common in the area.

Since there were no specific wildlife observations prior to the initiation of the study in 1967, it is difficult, at best, to evaluate

Table 6. Summary of shrub and tree canopy cover, ground cover classes, and numbers of woody species plants per acre for 1968 and 1979 from permanent belt (10' x 100') and 100 point transects. Data from exclosures in the juniper type of two pastures.

Shrub & Tree Canopy Cover %	Poison Buttes Exclosure II								Powder Rim Pasture B Exclosure II			
	Game & Livestock Exclusion				Livestock Exclusion				Game & Livestock Exclusion			
	Inside		Outside		Inside		Outside		Inside		Outside	
	<u>1968</u>	<u>1979</u>	<u>1968</u>	<u>1979</u>	<u>1968</u>	<u>1979</u>	<u>1968</u>	<u>1979</u>	<u>1968</u>	<u>1979</u>	<u>1968</u>	<u>1979</u>
Juos	16.0	18.5	37.0	33.0	12.5	14.5	23.0	23.0	19.0	20.5	18.0	21.0
Cemo	2.0	2.5										
Arno	2.0	3.5	3.0	2.5		5.5		.5	.5	.5	2.5	2.5
Artrr					14.0	8.0	8.0	6.0				
Total	20.0	24.5	40.0	35.5	26.5	28.0	31.0	29.5	19.5	21.0	20.5	23.5
Ground Cover Classes %												
Bare	65.0	51.0	55.0	42.0	55.0	41.5	54.5	39.5	70.5	45.0	73.5	46.0
Litter	23.5	27.0	35.5	39.5	26.0	37.5	36.5	42.0	24.0	27.0	16.5	28.5
Debris	2.0	10.0	2.0	9.0	5.5	8.5	1.0	11.0	2.0	4.0	1.0	3.5
Rock		1.0			2.5	0.5	5.0	2.5	1.5	16.5	1.0	13.5
Herbaceous	9.5	11.0	7.0	7.0	13.0	7.5	8.0	5.0	2.0	7.5	8.0	8.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 6. (cont.)

Number of Plants per Acre	Poison Buttes Enclosure II								Powder Rim Pasture B Enclosure II			
	Game & Livestock Exclusion				Livestock Exclusion				Game & Livestock Exclusion			
	Inside		Outside		Inside		Outside		Inside		Outside	
	1968	1979	1968	1979	1968	1979	1968	1979	1968	1979	1968	1979
Juos - Mature	240	261	327	327	218	240	261	261	240	283	327	261
Young	0	0	22	22	22	22	44	87	44	22	0	131
Seedling	0	0	0	0	44	0	44	0	0	0	0	0
Arno - Mature	2766	2026	8080	3615	0	3398	0	1045	653	632	2243	2134
Young		109		131	0	152	0	87	0	196	0	0
Seedling	0	22	327	0	0	0	0	0	87	0	109	0
Artr - Mature	0	22	0	0	7993	2701	3790	2069	0	0	0	0
Young	0	0	0	0	0	174	0	196	0	0	0	0
Seedling	0	0	0	0	1742	0	305	0	0	0	0	0
Cemo - Mature	1416	784	414	261	0	0	0	0	0	0	0	0
Young	0	370	0	218	0	0	0	0	0	0	0	0
Seedling	0	0	22	0	0	0	0	0	0	0	0	0
Putr - Mature	22	22	22	22	0	0	0	0	0	0	0	0
Young	0	0	0	0	0	0	0	0	0	0	0	0
Seedling	0	0	0	0	0	0	0	0	0	0	0	0
Atco - Mature	0	0	0	0	0	0	0	0	0	0	87	87
Young	0	0	0	0	0	0	0	0	0	0	0	0
Seedling	0	0	0	0	0	0	0	0	0	0	0	0
Total	4444	3616	9214	4596	10,019	6687	4444	3745	1024	1133	2766	2613

the influences of the grazing systems upon wildlife habitat and the wildlife species in the area, particularly small mammals, birds, predators, reptiles, and invertebrates. Since livestock grazing has taken place for many years, the major influences of the grazing systems project were spraying of big sagebrush, fence construction, and water developments. Many other factors influencing wildlife populations and habitat were operating at the same time.

Both sprayed and non-sprayed areas were utilized by both antelope and sage grouse throughout the summer. Cattle grazing did not appear to influence the use of any of the pastures by antelope, sage grouse or the few resident mule deer which occupied the juniper areas during the summer. Hedged true mountainmahogany plants were evident over the entire area, indicating primarily past heavy use by migratory deer populations. True mountainmahogany plants, protected from browsing by deer since 1968, appear to be in only slightly better condition than grazed plants, indicating that recovery from over-use is slow. Most of the wildlife species observed used the water developments extensively (ponds and windmills). Wildlife and domestic livestock distribution could be improved if more permanent water sources were maintained year-round.

It was noted by Gibbens and Fisser (1968) that the construction of fences probably caused a temporary reduction in antelope numbers on the study area. During the period of study, adult antelope have negotiated the woven wire fences with ever-increasing ease. Populations, estimated from total counts in one day from vehicle ground surveys, indicate that antelope populations have fluctuated from a low of 32 in 1967 to a high of 120 in 1971, 101 in 1975, and finally down to 46 in the summer of 1979.

Although most adult antelope readily jumped 32-inch high fences (woven wire and 1 strand barbed wire), fawns were not observed attempting to negotiate the fences without extreme provocation.

CONCLUSIONS

Because perennial grass cover amounts of increase did not differ among pasture units, it can be concluded that the management systems have had no differential effects since the study was begun 12 years ago. Western wheatgrass has not shown increases in cover values, but needle-andthread, Indian ricegrass and bluebunch wheatgrass have all made significant gains. Utilization on all perennials was light except for western wheatgrass, which received "proper use" or slightly above. Since utilization on most major forage species was light, and actual use in AUM's was often less than allowable use (Table 1), stocking rates can probably be considered as light to moderate. The results, then, seem to indicate that continuous grazing at lighter stocking rates can be as effective as rotational and deferred systems in restoring and maintaining a desirable range condition. At this particular stage of range recovery, continuous grazing has been effective. The results may be different at a more advanced stage of recovery. It will be necessary to continue the study to determine these long range results.

Effects of the grazing systems on wildlife and wildlife habitat seem to be minimal. Antelope have adapted fairly well to the fences, and have been able to extend their range since the study began (Gibbens and Fisser, 1972). Water developments, though few in number, are beneficial to the antelope as well as to other wildlife species.

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APPENDICES

APPENDIX A

Summaries of pasture trend study data of
vegetation cover and composition for 1975 and 1979

Appendix A

POISON BUTTES ALLOTMENT

C1-1
Artr-Agsm Type
NE exp., 2° slope
27 July 1975

C2-1
Artr-Agsm Type
W exp., 3° slope
15 July 1975

	Cover Avg.	% Comp. all G&F	Comp. % by Group	% Freq.		Cover Avg.	% Comp. all G&F	Comp. % by Group	% Freq.
Artr	13.03			65	Artr	14.36			80
Shrub Total	13.03				Shrub Total	14.36			
Agsm	0.30	8.60	11.16	80	Agsm	0.93	21.58	31.53	100
Brte	0.03	0.86	1.11	25	Feoc	0.01	0.23	0.33	5
Cael	0.52	14.90	19.34	85	Kocr	0.26	6.04	8.82	25
Orhy	0.05	1.44	1.85	5	Orhy	0.05	1.16	1.69	5
Pose	0.90	25.79	33.46	95	Pose	0.78	18.10	26.45	65
Sihy	0.09	2.58	3.34	25	Sihy	0.10	2.32	3.38	15
Stco	0.80	22.93	29.74	25	Stco	0.82	19.03	27.80	75
Grass Total	2.69	77.10	100.00		Grass Total	2.95	68.46	100.00	
Alac	0.01	0.28	1.25	5	Alac	0.01	0.23	0.73	10
Alde	0.09	2.58	11.25	85	Alde	0.13	3.02	9.56	90
Andi	0.04	1.15	5.00	15	Chat	0.02	0.46	1.48	15
Arabis spp.	0.01	0.28	1.25	5	Crepis spp.	0.05	1.16	3.68	45
Aspu	0.02	0.57	2.50	15	Eren	0.01	0.23	0.73	5
Cach	0.01	0.28	1.25	5	Erov	0.03	0.69	2.20	5
Eren	0.02	0.57	2.50	20	Oppo	0.25	5.81	18.38	10
Lofo	0.01	0.28	1.25	5	Phho	0.76	17.63	55.88	55
Oppo	0.23	6.60	28.75	15	Phlo	0.05	1.16	3.68	45
Phho	0.27	7.74	33.75	45	Spco	0.03	0.69	2.20	5
Phlo	0.03	0.86	3.75	25	Trgy	0.02	0.46	1.48	15
Saka	0.01	0.28	1.25	5					
Spco	0.01	0.28	1.25	5	Forb Total	1.36	31.54	100.00	
Trgy	0.04	1.15	5.00	35					
Forb Total	0.80	22.90	100.00		Grass and Forb Total	4.31	100.00		
Grass and Forb Total	3.49	100.00							

Appendix A

POISON BUTTES ALLOTMENT

C1-1

Artr-Agsm Type
NE exp., 2° slope
7 August, 1979

C2-1

Artr-Agsm Type
West exp., 3° slope
3 July, 1979

	Cover %	Comp. %	Comp. %	%		Cover %	Comp. %	Comp. %	%
	Avg.	all	G&F	by Group	Freq.		Avg.	all	G&F
									by Group
									Freq.
Artr	10.21			60		Artr	9.53		70
Shrub Total	10.21					Shrub Total	9.53		
Agsm	.45	8.18	10.79	65		Agsm	1.28	15.01	18.16
Pose	1.40	25.45	33.57	70		Kocr	.41	4.81	5.82
Cael	.50	9.09	11.99	45		Orhy	.35	4.10	4.96
Stco	1.65	30.00	39.57	70		Pose	2.09	24.50	29.65
Orhy	.12	2.18	2.88	5		Sihy	.08	.94	1.13
Pofe	.05	.91	1.20	5		Stco	2.84	33.29	40.28
Grass Total	4.17	75.82	100.00			Grass Total	7.05	82.65	100.00
Fhho	.66	12.00	49.63	30		Cyac	.01	.12	.68
Trgy	.05	.91	3.76	5		Andi	.08	.94	5.41
Alde	.08	1.45	6.02	70		Crepis spp.	.19	2.23	12.84
Spco	.02	.36	1.50	15		Eren	.11	1.29	7.43
Phlo	.02	.36	1.50	10		Oppo	.10	1.17	6.76
Ahdi	.18	3.27	13.53	5		Phho	.39	4.57	26.35
Eren	.10	1.82	7.52	25		Phlo	.14	1.64	9.46
Oppo	.22	4.00	16.54	10		Spco	.10	1.17	6.76
						Trgy	.03	.35	2.03
						Alde	.33	3.87	22.30
Forb Total	1.33	24.18	100.00			Forb Total	1.48	17.35	100.00
Forb & Grass						Forb & Grass			
Total	5.50	100.00				Total	8.53	100.00	
Bare Ground	78.27			100		Bare Ground	72.36		100
Litter	15.26			100		Litter	17.95		100
Rock	.30			10		Rock	.30		30

Appendix A

POISON BUTTES ALLOTMENT

C3-1
Artr-Agsm-Oppo Type
SW exp., 3° slope
26 July 1975

C4-1
Artr-Agsm-Oppo Type
W exp., 3.5° slope
27 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	14.63			80	Artr	11.60		97.90	50
					Chvl	0.25		2.10	5
Shrub Total	14.63				Shrub Total	11.85		100.00	
Agsm	1.23	33.25	45.73	100	Agsm	1.79	37.14	52.81	95
Brte	0.01	0.27	0.37	5	Brte	0.01	0.20	0.29	5
Cael	0.09	2.44	3.34	25	Cael	0.01	0.20	0.29	10
Kocr	0.38	10.28	14.13	20	Kocr	0.01	0.20	0.29	10
Pofe	0.06	1.63	2.23	10	Orhy	0.01	0.20	0.29	5
Pose	0.60	16.22	22.31	70	Pofe	0.31	6.44	9.15	15
Sihy	0.06	1.63	2.23	10	Pose	1.12	23.24	33.02	95
Stco	0.26	7.03	9.66	25	Sihy	0.02	0.42	0.59	15
					Stco	0.11	2.29	3.25	10
Grass Total	2.69	72.75	100.00		Grass Total	3.39	70.33	100.00	
Alac	0.01	0.27	0.99	5	Alde	0.12	2.49	8.40	100
Alde	0.11	2.92	10.89	90	Andi	0.01	0.21	0.69	5
Andi	0.06	1.63	5.94	10	Crepis spp.	0.08	1.65	5.60	55
Arabis spp.	0.01	0.27	0.99	5	Eren	0.02	0.42	1.40	15
Crepis spp.	0.02	0.54	1.98	15	Erov	0.08	1.66	5.60	5
Eren	0.02	0.54	1.98	20	Lare	0.01	0.20	0.69	5
Lare	0.01	0.27	0.99	5	Lofe	0.01	0.27	0.99	10
Lofe	0.01	0.27	0.99	10	Oeco	0.01	0.27	0.99	5
Oeco	0.01	0.27	0.99	5	Oppo	0.48	12.98	47.53	25
Oppo	0.48	12.98	47.53	25	Phho	0.12	3.24	11.88	30
Phho	0.12	3.24	11.88	30	Phlo	0.14	3.78	13.86	45
Phlo	0.14	3.78	13.86	45	Spco	0.01	0.27	0.99	10
Spco	0.01	0.27	0.99	10	Forb Total	1.43	29.67	100.00	
Forb Total	1.01	27.25	100.00		Grass and Forb Total	4.82	100.00		
Grass and Forb Total	3.70	100.00							

Appendix A

POISON BUTTES ALLOTMENT

C3-1

Artr-Agsm-Oppo Type

SW exp., 3° slope

24 July, 1979

C4-1

Artr-Agsm-Oppo Type

W exp., 3.5° slope

7 August, 1979

	Cover % Avg.	Comp. % all G&F by Group	Comp. % all G&F by Group	% Freq.		Cover % Avg.	Comp. % all G&F by Group	Comp. % all G&F by Group	% Freq.
Artr	9.13			40	Artr	13.08			45
Shrub Total	9.13				Shrub Total	13.08			
Agsm	1.11	26.88	38.28	90	Agsm	1.40	22.58	45.45	80
Sihy	.03	.73	1.03	5	Pose	1.27	20.48	41.23	75
Pose	.81	19.61	27.93	55	Pofe	.14	2.26	4.55	10
Cael	.12	2.91	4.14	35	Sihy	.03	.48	.97	5
Stco	.68	16.46	23.45	40	Cael	.03	.48	.97	5
Kocr	.15	3.63	5.17	10	Stco	.20	3.23	6.49	15
					Orhy	.01	.16	.32	5
Grass Total	2.90	70.22	100.00		Grass Total	3.08	49.67	100.00	
Alde	.49	11.86	39.84	5	Crepis spp.	.20	3.23	6.41	25
Oppo	.61	14.77	49.59	30	Alde	.13	2.10	4.17	95
Phlo	.10	2.42	8.13	30	Phlo	.04	.65	1.28	15
Spco	.03	.73	2.44	5	Lare	.01	.16	.32	90
					Oppo	2.48	40.00	79.49	55
					Erov	.13	2.10	4.17	95
					Phho	.10	1.61	3.21	90
					Eren	.03	.48	.96	95
Forb Total	1.23	29.78	100.00		Forb Total	3.12	50.33	100.00	
Forb & Grass Total	4.13	100.00			Forb & Grass Total	6.20	100.00		
Bare Ground	80.13			100	Bare Ground	72.38			100
Litter	14.60			100	Litter	22.50			100
Rock	0.00			0	Rock	0.00			0

Appendix A

POISON BUTTES ALLOTMENT

C5-1

Artrr-Agsm Type

E exp., 0.5° slope

27 July 1975

C6-1

Artrr-Agsm Type

E exp., 0.5° slope

27 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Arsp	1.10		9.00	15	Artrr	11.83		96.80	80
Artrr	7.36		60.23	40	Eula	0.21		1.72	15
Atga	3.51		28.73	25	Juos	0.18		1.48	5
Chvi	0.10		0.81	5					
Magl	0.15		1.23	5	Shrub Total	12.22		100.00	
Shrub Total	12.22		100.00		Agsm	1.44	40.34	52.37	80
Agsm	1.03	28.78	39.93	65	Pofe	0.58	16.25	21.09	20
Brte	0.01	0.28	0.38	5	Pose	0.72	20.17	26.18	85
Orhy	0.11	3.08	4.26	10	Stco	0.01	0.28	0.36	5
Pose	1.04	29.06	40.32	75	Grass Total	2.75	77.04	100.00	
Sihy	0.39	10.90	15.11	40	Alac	0.03	0.84	3.66	25
Grass Total	2.58	72.10	100.00		Alde	0.06	1.68	7.32	60
Alac	0.02	0.55	2.00	20	Andi	0.10	2.80	12.20	30
Alde	0.04	1.11	4.00	40	Crepis spp.	0.04	1.12	4.88	35
Andi	0.30	8.38	30.00	5	Eren	0.03	0.84	3.66	30
Crepis spp.	0.01	0.28	1.00	10	Gypa	0.01	0.28	1.22	10
Eren	0.06	1.68	6.00	55	Lare	0.02	0.56	2.43	15
Lare	0.02	0.55	2.00	15	Lise	0.03	0.84	3.66	25
Lofo	0.03	0.83	3.00	25	Lofo	0.02	0.56	2.43	15
Oppo	0.30	8.38	30.00	5	Migr	0.02	0.56	2.43	15
Phho	0.13	3.64	13.00	25	Oean	0.04	1.12	4.88	35
Phlo	0.04	1.11	4.00	40	Phho	0.34	9.52	41.77	45
Trgy	0.05	1.39	5.00	45	Phlo	0.04	1.12	4.88	35
Forb Total	1.00	27.90	100.00		Trgy	0.04	1.12	4.88	40
Grass and Forb Total	3.58	100.00			Forb Total	0.82	22.96	100.00	
					Grass and Forb Total	3.57	100.00		

Appendix A

POISON BUTTES ALLOTMENT

C5-1

Artr-Agsm Type

E exp., 0.5° slope

7 August 1979

C6Tr1

Artr-Agsm Type

E exp., 0.5° slope

14 August 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Arsp	1.15		.37	15	Artr	11.86		.96	80
Atga	1.95		.62	20	Juos	.25		.02	5
Chvi	.03		.01	5	Eula	.23		.02	10
Shrub Total	3.13		100.00		Shrub Total	12.16		100.00	
Agsm	.79	12.76	17.25	45	Agsm	1.07	27.02	36.90	75
Pose	3.54	57.19	77.29	25	Pose	1.25	31.57	43.10	65
Sihi	.05	.81	1.09	5	Pofe	.55	13.89	18.97	15
Orhy	.20	3.23	4.37	10	Stco	.03	.76	1.03	5
Grass Total	4.58	73.99	100.00		Grass Total	2.90	73.24	100.00	
Alde	.08	1.29	4.97	60	Alde	.06	1.52	5.66	50
Phlo	.08	1.29	4.97	40	Eren	.19	4.80	17.92	50
Eren	.49	7.92	30.43	85	Phlo	.05	1.26	4.72	30
Phho	.35	5.65	21.74	10	Trgy	.01	.25	.94	10
Ahdi	.19	3.07	11.80	5	Andi	.08	2.02	7.55	10
Lare	.01	.16	.62	5	Phho	.48	12.12	45.28	35
Oppo	.40	6.46	24.84	10	Crepis spp.	.10	2.53	9.43	40
Alte	.01	.16	.62	10	Gisi	.06	1.52	5.66	50
					Unk. Forb	.02	.51	1.89	20
					Arabis spp.	.01	.25	.94	5
Forb Total	1.61	26.01	100.00		Forb Total	1.06	26.76	100.00	
Forb & Grass Total	6.19	100.00			Forb & Grass Total	3.96			
Bare Ground	81.86			100	Bare Ground	74.53			100
Litter	9.11			100	Litter	21.19			100
Rock	0.00			0	Rock	0.00			0

Appendix A

POISON BUTTES ALLOTMENT

C7-1

Arthr-Agsm Type Sprayed

NE exp., 2° slope

27 July 1975

C8-1

Arthr-Agsm Type Sprayed

NE exp., 0.5° slope

28 July 1975

	Cover %	Comp. %	Comp. %	%		Cover %	Comp. %	Comp. %	%
	Avg.	all G&F	by Group	Freq.		Avg.	all G&F	by Group	Freq.
Arthr	0.30			5	Arthr	4.69			35
Shrub Total	0.30				Shrub Total	4.69			
Agsm	3.66	45.64	50.14	100	Agsm	4.00	58.23	65.05	100
Brte	0.01	0.12	0.13	5	Brte	0.01	0.14	0.16	5
Kocr	1.39	17.34	19.05	70	Kocr	0.08	1.17	1.31	10
Pofe	0.62	7.74	8.49	45	Pofe	0.33	4.81	5.36	30
Pose	1.57	19.58	21.51	100	Pose	1.29	18.78	20.98	100
Sihy	0.05	0.63	0.68	25	Sihy	0.14	2.04	2.27	30
					Stco	0.30	4.37	4.87	15
Grass Total	7.30	91.05	100.00		Grass Total	6.15	89.54	100.00	
Alac	0.01	0.12	1.39	5	Alac	0.05	0.72	6.95	50
Alde	0.08	1.00	11.12	60	Alde	0.12	1.74	16.67	100
Andi	0.01	0.12	1.38	5	Andi	0.03	0.43	4.16	10
Arabis spp.	0.01	0.12	1.38	5	Asdr	0.03	0.43	4.16	5
Canu	0.01	0.12	1.38	5	Copa	0.08	1.17	11.12	75
Copa	0.15	1.88	20.84	15	Copa	0.01	0.14	1.38	5
Crepis spp.	0.01	0.12	1.38	5	Eren	0.01	0.14	1.38	5
Eren	0.03	0.37	4.17	30	Gypa	0.08	1.17	11.12	75
Lise	0.01	0.12	1.38	5	Lise	0.08	1.17	11.12	75
Migr	0.09	1.13	12.51	85	Migr	0.04	0.58	5.55	40
Oean	0.01	0.12	1.39	5	Oean	0.08	1.17	11.12	75
Oppo	0.02	0.24	2.78	5	Phlo	0.02	0.29	2.77	15
Phho	0.16	2.00	22.23	20	Phlo	0.08	1.17	11.12	80
Phlo	0.09	1.13	12.51	65	Posa	0.01	0.14	1.38	10
Posa	0.01	0.12	1.38	20	Trgy	0.02	0.24	2.78	10
Trgy	0.02	0.24	2.78	10					
Forb Total	0.72	8.95	100.00		Forb Total	0.72	10.46	100.00	
Grass and					Grass and				
Forb Total	8.02	100.00			Forb Total	6.87	100.00		

Appendix A

POISON BUTTES ALLOTMENT

C7-1
Artr-Agsm Type Sprayed
N exp., 2° slope
2 August 1979

C8-1
Artr-Agsm Type Sprayed
NE exp., 0.5° slope
2 August 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	1.75			5	Artr	8.88			60
Shrub Total	1.75				Shrub Total	8.88			
Agsm	3.79	38.52	52.28	100	Agsm	3.12	49.60	55.62	100
Pose	2.68	27.24	36.97	90	Pose	1.30	20.67	23.17	15
Kocr	.78	7.93	10.76	40	Pofe	.23	3.66	4.10	10
					Kocr	.10	1.59	1.78	5
					Stco	.86	13.67	15.33	30
Grass Total	7.25	73.69	100.00		Grass Total	5.61	88.19	100.00	
Phlo	.32	3.25	12.36	50	Alde	.16	2.54	23.53	100
Eren	.13	1.32	5.02	10	Andi	.10	1.59	14.71	5
Phho	.45	4.57	17.37	15	Phlo	.04	.64	5.88	25
Alde	.07	.71	2.70	55	Cora	.07	1.11	10.29	15
Trgy	.01	.10	.39	5	Eren	.02	.32	2.94	15
Oppo	1.55	15.75	59.85	10	Oeco	.13	2.07	19.12	100
Andi	.04	.41	1.54	5	Posa	.03	.48	4.41	25
Oeco	.02	.20	.77	15	Asdr	.03	.48	4.41	5
					Ermi	.10	1.59	14.71	5
Forb Total	2.59	26.31	100.00		Forb Total	.68	11.81	100.00	
Forb & Grass Total	9.84				Forb & Grass Total	6.29	100.00		
Bare Ground	74.62			100	Bare Ground	65.95			100
Litter	15.68			100	Litter	27.85			100
Rock	0.00			0	Rock	0.00			0

Appendix A

POISON BUTTES ALLOTMENT

C9-1
Artr-Agsm Type
N exp., 1⁰ slope
28 July 1975

C10-1
Artr-Agsm Type
SE exp., 3⁰ slope
27 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	9.46			95	Artr	9.94		99.50	75
Shrub Total	9.46				Atco	0.05		0.05	5
Agsm	1.52	28.21	35.35	95	Shrub Total	9.99		100.00	
Kocr	0.28	5.20	6.52	30	Agsm	0.83	34.59	39.16	55
Orhy	0.01	0.18	0.23	10	Brte	0.22	9.17	10.37	80
Pofe	0.66	12.25	15.34	35	Orhy	0.01	0.41	0.47	5
Pose	1.29	23.94	30.00	95	Pose	0.78	32.51	36.80	70
Sihi	0.16	2.97	3.73	25	Sihi	0.23	9.59	10.85	55
Stco	0.38	7.06	8.83	30	Stco	0.05	2.08	2.35	5
Grass Total	4.30	79.81	100.00		Grass Total	2.12	88.35	100.00	
Aggl	0.02	0.37	1.83	20	Alac	0.01	0.41	3.57	5
Alac	0.05	0.93	4.59	45	Alde	0.10	4.17	35.72	100
Alde	0.06	1.11	5.51	55	Andi	0.03	1.26	10.72	5
Andi	0.21	3.90	19.27	25	Arabis spp.	0.01	0.41	3.57	10
Asci	0.01	0.18	0.91	5	Crepis	0.01	0.41	3.57	5
Canu	0.05	0.93	4.59	5	Eren	0.01	0.41	3.57	30
Chat	0.01	0.18	0.91	5	Lofo	0.01	0.41	3.57	5
Cora	0.02	0.37	1.83	20	Phho	0.03	1.25	10.71	5
Crepis spp.	0.01	0.18	0.91	5	Phlo	0.03	1.25	10.71	30
Eren	0.01	0.18	0.91	10	Spco	0.01	0.41	3.57	10
Gypa	0.05	0.93	4.59	45	Trgy	0.03	1.26	10.72	30
Lise	0.05	0.93	4.59	45	Forb Total	0.28	11.65	100.00	
Lofo	0.01	0.18	0.91	10	Grass and Forb Total	2.40	100.00		
Migr	0.09	1.67	8.26	90					
Oppo	0.08	1.48	7.34	5					
Phho	0.21	3.90	19.27	15					
Phlo	0.03	0.55	2.76	30					
Posa	0.06	1.11	5.51	60					
Trgy	0.06	1.11	5.51	60					
Forb Total	1.09	20.19	100.00						
Grass and Forb Total	5.39	100.00							

Appendix A

POISON BUTTES ALLOTMENT

C9-1
Artr-Agsm Type
N exp., 1st slope
2 August 1979

C10-1
Artr-Agsm Type
Se exp., 3rd slope
10 August 1979

	Cover % Avg.	Comp. % all G&F by Group	Comp. % all G&F by Group	% Freq.		Cover % Avg.	Comp. % all G&F by Group	Comp. % all G&F by Group	% Freq.
Artr	10.80			85	Artr	12.60		.99	70
					Atco	.15		.10	5
Shrub Total	10.80				Shrub Total	12.75		100.00	
Agsm	.54	12.56	15.25	70	Agsm	.76	25.00	30.52	60
Pose	1.15	26.74	32.50	80	Pose	1.19	39.14	47.79	55
Pofe	.73	16.98	20.62	25	Sihy	.42	13.82	16.87	30
Kocr	.43	10.00	12.15	20	Brte	.02	.66	.80	15
Stco	.64	14.88	18.08	40	Stco	.10	3.29	4.02	5
Orhy	.05	1.16	1.41	5					
Grass Total	3.54	82.34	100.00		Grass Total	2.49	81.91	100.00	
Trgy	.04	.93	5.26	40	Spco	.05	1.64	9.09	15
Phlo	.04	.93	5.26	25	Alde	.15	4.93	27.27	100
Cora	.14	3.26	18.42	25	Phho	.23	7.57	41.82	5
Aggl	.01	.23	1.32	5	Phlo	.04	1.32	7.27	15
Oppo	.10	2.33	13.16	5	Eren	.06	1.97	10.91	10
Eren	.01	.23	1.32	5	Lare	.02	.66	3.64	15
Alde	.06	1.40	7.89	55					
Phho	.26	6.05	34.21	15					
Oeco	.07	1.63	9.21	60					
Posa	.03	.70	3.95	30					
Forb Total	.76	17.65	100.00		Forb Total	.55	18.09	100.00	
Forb & Grass Total	4.30	100.00			Forb & Grass Total	3.04			
Bare Ground	65.23			100	Bare Ground	69.12			100
Litter	30.51			100	Litter	27.65			100
Rock	0.00			0	Rock	0.00			0

Appendix A

OPPENHIEMER ALLOTMENT - EAST PASTURE

C1-1

Artr-Agsm-Oppo Type

SW exp., 3° slope

26 July 1975

C2-1

Artr-Agsm Type

SW exp., 3° slope

26 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	6.27			65	Artr	7.66			65
Shrub Total	6.27				Shrub Total	7.66			
Agsm	1.93	31.75	60.70	95	Agsm	0.21	10.50	19.10	55
Brte	0.13	2.13	4.08	85	Brte	0.08	4.00	7.27	40
Cael	0.16	2.63	5.03	15	Pose	0.66	33.00	60.00	85
Feoc	0.01	0.16	0.31	5	Sihy	0.05	2.50	4.54	25
Orhy	0.01	0.16	0.31	5	Stco	0.10	5.00	9.09	5
Pose	0.31	5.10	9.75	60					
Sihy	0.09	1.48	2.83	15	Grass Total	1.10	55.00	100.00	
Stco	0.54	8.89	16.99	50					
Grass Total	3.18	52.30	100.00		Alde	0.10	5.00	11.11	100
					Alte	0.02	1.00	2.22	20
Alac	0.02	0.33	0.69	20	Andi	0.06	3.00	6.66	15
Alde	0.12	1.97	4.14	100	Arabis spp.	0.01	0.50	1.11	5
Chat	0.03	0.50	1.04	30	Eren	0.02	1.00	2.22	20
Depi	0.01	0.16	0.34	5	Erov	0.13	6.50	14.45	10
Erov	0.03	0.50	1.04	5	Haac	0.23	11.50	25.56	5
Gara	0.01	0.16	0.34	10	Lofo	0.01	0.50	1.11	10
Lare	0.01	0.16	0.34	5	Oppo	0.13	6.50	14.45	5
Lofo	0.02	0.33	0.69	15	Phho	0.10	5.00	11.10	35
Oppo	2.60	42.77	89.66	70	Phlo	0.03	1.50	3.33	30
Phlo	0.03	0.50	1.04	30	Spco	0.01	0.50	1.11	10
Spco	0.01	0.16	0.34	5	Trgy	0.05	2.50	5.55	45
Trgy	0.01	0.16	0.34	5					
Forb Total	2.90	47.70	100.00		Forb Total	0.90	45.00	100.00	
Grass and Forb Total	6.08	100.00			Grass and Forb Total	2.00	100.00		

Appendix A

OPPENHIEMER ALLOTMENT - EAST PASTURE

C1-1

Artr-Agsm-Oppo Type
SW exp., 3° slope
8 August 1979

C2-1

Artr-Agsm Type
SW exp., 3° slope
8 August 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	6.40			40	Artr	5.98			35
Shrub Total	6.40				Shrub Total	5.98			
Agsm	1.17	82.51	93.31	70	Agsm	.16	5.71	12.60	30
Pose	.43	1.52	1.73	30	Pose	.76	27.14	59.84	50
Stco	.74	2.62	2.99	35	Sihy	.14	5.00	11.02	5
Orhy	.01	.04	.04	5	Stco	.20	7.14	15.75	5
Cael	.28	.99	1.13	25	Brte	.01	.36	.79	10
Brte	.03	.11	.12	5					
Grass Total	2.66	87.79	100.00		Grass Total	1.27	45.35	100.00	
Alde	.19	.67	5.51	100	Spco	.13	4.64	8.50	10
Oppo	3.18	11.26	92.17	70	Trgy	.01	.36	.65	5
Phlo	.07	.25	2.03	25	Alde	.10	3.57	6.54	90
Eren	.01	.04	.29	10	Phho	.13	4.64	8.50	15
					Alte	.01	.36	.65	10
					Haac	.55	19.64	35.95	5
					Eren	.13	4.64	8.50	15
					Phlo	.02	.71	1.31	10
					Oppo	.13	4.64	8.50	10
					Erov	.32	11.43	20.92	15
Forb Total	3.45	12.21	100.00		Forb Total	1.53	54.65	100.00	
Forb & Grass Total	28.24	100.00			Forb & Grass Total	2.80	100.00		
Bare Ground	57.03			100	Bare Ground	90.06			100
Litter	36.85			100	Litter	7.05			100
Rock	0.00			0	Rock	.23			25

Appendix A

OPPENHIEMER ALLOTMENT - EAST PASTURE

C3-1

Artrr-Agsm Type-Sprayed

N exp., 3° slope

26 July 1975

C4-1

Artrr-Agsm Type

SW exp., 0.5° slope

26 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artrr	1.02			35	Artrr	8.65			75
Shrub Total	1.02				Shrub Total	8.65			
Agsm	3.27	59.24	63.50	100	Agsm	0.96	22.17	34.54	75
Brte	0.23	4.17	4.46	65	Kocr	0.25	5.77	8.99	5
Cael	0.03	0.54	0.58	10	Pose	1.07	24.71	38.49	85
Camo	0.08	1.44	1.55	10	Sihy	0.17	3.92	6.11	25
Pofe	0.05	0.90	0.97	5	Stco	0.33	7.62	11.87	20
Pose	1.07	19.39	20.78	90					
Sihy	0.42	7.61	8.16	35	Grass Total	2.78	64.19	100.00	
Grass Total	5.15	93.29	100.00		Alde	0.15	3.47	9.68	90
Alac	0.01	0.18	2.70	5	Andi	0.04	0.92	2.58	20
Alde	0.09	1.64	24.33	90	Arabis spp.	0.02	0.46	1.29	20
Andi	0.05	0.91	13.52	5	Eren	0.03	0.69	1.93	30
Chat	0.02	0.36	5.40	15	Erov	0.05	1.16	3.23	10
Crepis spp.	0.01	0.18	2.70	10	Lare	0.01	0.23	0.64	5
Crke	0.02	0.36	5.40	15	Oppo	0.58	13.40	37.42	15
Eren	0.07	1.27	18.92	50	Phho	0.66	15.25	42.59	70
Gara	0.01	0.18	2.70	10	Spco	0.01	0.23	0.64	10
Phho	0.05	0.91	13.52	5	Forb Total	1.55	35.81	100.00	
Phlo	0.04	0.72	10.81	15	Grass and Forb Total	4.33	100.00		
Forb Total	0.37	6.71	100.00						
Grass and Forb Total	5.52	100.00							

Appendix A

OPPENHIEMER ALLOTMENT - EAST PASTURE

C3-1

Artr-Agsm Type Sprayed

N exp., 3° slope

8 August 1979

C4-1

Artr-Agsm Type

SW exp., 0.5° slope

8 August 1979

	Cover %	Comp. %	Comp. %	%		Cover %	Comp. %	Comp. %	%
	Avg.	all	G&F	by Group	Freq.	Avg.	all	G&F	by Group
									Freq.
Artr	1.02				20	Artr	4.83		40
Shrub Total	1.02					Shrub Total	4.83		
Agsm	2.38	45.25	50.42		85	Agsm	.23	7.14	33.33
Pose	1.89	35.93	40.04		80	Pose	.43	13.35	62.32
Sihy	.18	3.42	3.81		10	Stco	.03	.93	4.35
Cael	.06	1.14	1.27		10				5
Brte	.11	2.09	2.33		25				
Pofe	.10	1.90	2.12		5				
Grass Total	4.72	89.73	100.00			Grass Total	.69	21.42	100.00
Unid	.03	.57	5.56		5	Oppo	.93	28.88	36.76
Alde	.22	4.18	40.74		100	Phho	1.30	40.37	51.38
Eren	.12	2.28	22.22		35	Apco	.02	.62	.79
Phlo	.06	1.14	11.11		10	Alde	.15	4.66	5.93
Crepis spp.	.03	.57	5.56		5	Andi	.05	1.55	1.98
Lare	.07	1.33	12.96		35	Erov	.01	.31	.40
Gisi	.01	.19	1.85		5	Arabis spp.	.02	.62	.79
						Eren	.01	.31	.40
						Lare	.04	1.24	1.58
Forb Total	.54	10.27	100.00			Forb Total	2.53	78.58	100.00
Forb & Grass						Forb & Grass			
Total	5.26	100.00				Total	3.22	100.00	
Bare Ground	77.68				100	Bare Ground	81.41		100
Litter	16.95				100	Litter	15.45		100
Rock	.15				15	Rock	0.00		0

Appendix A

OPPENHIEMER ALLOTMENT - EAST PASTURE

C5-1

Artr-Agsm Type-Sprayed

NE exp., 0.5° slope

26 July 1975

C6-1

Artr-Agsm Type-Sprayed

N NE exp., 1.5° slope

25 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	7.37			70	Artr	6.46			50
Shrub Total	7.37				Shrub Total	6.46			
Agsm	1.69	49.28	62.37	100	Agsm	1.15	34.44	48.11	95
Pofe	0.20	5.84	7.38	15	Brte	0.01	0.30	0.41	5
Pose	0.68	19.83	25.09	75	Orhy	0.45	13.48	18.83	5
Sihy	0.14	4.09	5.16	25	Pose	0.68	20.36	28.46	90
					Sihy	0.10	3.00	4.19	10
Grass Total	2.71	79.04	100.00		Grass Total	2.39	71.58	100.00	
Alac	0.01	0.29	1.38	10	Alde	0.07	2.10	7.36	65
Alde	0.11	3.20	15.28	85	Andi	0.06	1.80	6.31	10
Andi	0.01	0.29	1.38	5	Arabis spp.	0.01	0.29	1.05	5
Cora	0.13	3.80	18.06	65	Cora	0.01	0.29	1.05	10
Crepis spp.	0.04	1.16	5.56	35	Crepis spp.	0.01	0.29	1.05	5
Eren	0.04	1.16	5.56	40	Eren	0.05	1.50	5.27	50
Lare	0.02	0.58	2.78	20	Lare	0.01	0.29	1.05	5
Lofo	0.01	0.29	1.38	5	Lofo	0.02	0.60	2.11	20
Oppo	0.20	5.83	27.77	5	Oppo	0.48	14.38	50.53	20
Phho	0.08	2.33	11.12	15	Phho	0.19	5.69	20.01	35
Phlo	0.05	1.45	6.95	50	Phlo	0.03	0.90	3.16	30
Trgy	0.02	0.58	2.78	20	Trgy	0.01	0.29	1.05	10
Forb Total	0.72	20.96	100.00		Forb Total	0.95	28.42	100.00	
Grass and Forb Total	3.43	100.00			Grass and Forb Total	3.34	100.00		

Appendix A

OPPENHIEMER ALLOTMENT - EAST PASTURE

C5-1

Artr-Agsm Type Sprayed
NE exp., 0.5° slope
1 August 1979

C6-1

Artr-Agsm Type Sprayed
N NE exp., 1.5° slope
10 August 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	12.81			60	Artr	4.81			50
Shrub Total	12.81				Shrub Total	4.81			
Agsm	1.05	38.60	53.85	90	Agsm	1.14	22.01	36.66	85
Sihy	.01	.37	.51	5	Pose	.82	15.83	26.37	60
Pose	.64	23.53	32.82	45	Orhy	1.15	22.20	36.98	5
Pofe	.25	9.19	12.82	10					
Grass Total	1.95	71.69	100.00		Grass Total	3.11	60.04	100.00	
Alde	.07	2.57	9.09	65	Phlo	.02	.39	.97	15
Cora	.07	2.57	9.09	45	Oppo	1.48	28.57	71.50	25
Phlo	.03	1.10	3.90	20	Eren	.30	5.79	14.49	55
Eren	.16	5.88	20.78	35	Alde	.09	1.74	4.35	80
Lare	.02	.74	2.60	15	Phho	.15	2.90	7.25	5
Phho	.02	.74	2.60	10	Cora	.01	.19	.49	10
Oppo	.30	11.03	38.96	5	Lare	.02	.39	.97	15
Aggl	.10	3.68	12.99	25					
Forb Total	.77	28.31	100.00		Forb Total	2.07	39.96	100.00	
Forb & Grass Total	2.72	100.00			Forb & Grass Total	5.18	100.00		
Bare Ground	69.28			100	Bare Ground	72.83			100
Litter	27.78			100	Litter	21.90			100
Rock	0.00			0	Rock	0.00			0

Appendix A

OPPENHIEMER ALLOTMENT - EAST PASTURE

C7-1
Artr-Agsm Type
E exp., 0.25° slope
26 July 1975

C8-1
Juos Type
S exp., 10° slope
25 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	22.93			85	Arno	7.01		69.69	50
Shrub Total	22.93				Cemo	3.05		30.31	10
Agsm	0.22	7.86	10.29	70	Shrub Total	10.06		100.00	
Pofe	0.33	11.79	15.42	10	Agsp	0.21	8.86	36.85	25
Pose	1.12	40.01	52.34	85	Orhy	0.29	12.23	50.87	30
Sihiy	0.47	16.79	21.96	45	Pose	0.07	2.95	12.28	30
Grass Total	2.14	76.45	100.00		Grass Total	0.57	24.04	100.00	
Alac	0.01	0.35	1.51	10	Andi	0.03	1.26	1.66	5
Alde	0.06	2.15	9.09	55	Arfe	0.11	4.65	6.12	50
Andi	0.01	0.35	1.51	5	Canu	0.01	0.42	0.55	5
Arabis spp.	0.01	0.35	1.51	15	Crfc	0.13	5.49	7.23	10
Crepis spp.	0.02	0.72	3.04	15	Eren	0.05	2.10	2.77	5
Dapi	0.01	0.35	1.51	5	Gisi	0.01	0.42	0.55	10
Eren	0.05	1.78	7.57	45	Haac	0.88	37.14	48.89	45
Lare	0.01	0.35	1.51	10	Oppo	0.35	14.77	19.45	5
Oeco	0.01	0.35	1.51	5	Phho	0.22	9.29	12.23	45
Oppo	0.25	8.93	37.88	5	Trgy	0.01	0.42	0.55	5
Phho	0.18	6.43	27.28	45	Forb Total	1.80	75.96	100.00	
Phlo	0.02	0.72	3.04	15	Grass and				
Trgy	0.02	0.72	3.04	15	Forb Total	2.37	100.00		
Forb Total	0.66	23.55	100.00						
Grass and									
Forb Total	2.80	100.00							

Appendix A

OPPENHIEMER ALLOTMENT - EAST PASTURE

C7-1
Artr-Agsm Type
E exp., 0.25° slope
1 August 1979

C8-1
Juos Type
S exp., 10° slope
1 August 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	19.83			75	Arno	7.18		.89	45
					Cemo	.90		.11	5
Shrub Total	19.83				Shrub Total	8.08		100.00	
Agsm	.28	9.03	10.94	50	Agsp	.33	13.58	55.00	20
Pose	1.65	53.23	64.45	65	Pose	.09	3.70	15.00	10
Sihy	.25	8.06	9.77	15	Orhy	.18	7.41	30.00	10
Pofe	.38	12.26	14.84	10					
Grass Total	2.56	82.58	100.00		Grass Total	.60	24.69	100.00	
Phho	.32	10.32	59.26	30	Haac	1.41	58.02	77.05	55
Eren	.03	.97	5.56	20	Arfe	.11	4.53	6.01	40
Alde	.05	1.61	9.26	40	Phho	.24	9.88	13.11	25
Phlo	.01	.32	1.85	5	Andi	.03	1.23	1.64	5
Andi	.08	2.58	14.81	5	Phau	.03	1.23	1.64	5
Lare	.03	.97	5.56	10	Alde	.01	.41	.55	10
Oeco	.01	.32	1.85	10					
Aggl	.01	.32	1.85	10					
Forb Total	.54	17.42	100.00		Forb Total	1.83	75.31	100.00	
Forb & Grass Total	3.10	100.00			Forb & Grass Total	2.43	100.00		
Bare Ground	77.93			100	Bare Ground	91.12			100
Litter	19.05			100	Litter	2.86			95
Rock	0.00			0	Rock	3.65			100

Appendix A

OPPENHIEMER ALLOTMENT - WEST PASTURE

C1-1
Artr-Agsm Type
SE exp., 1^o slope
20 June 1975

C2-1
Artr-Agsm Type-Sprayed
N NE exp., 2^o slope
17 June 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Arsp	1.41		18.62	25	Artr	6.48		96.29	55
Artr	6.15		81.25	30	Atco	0.25		3.71	5
Atga	0.01		0.13	5					
Shrub Total	7.57		100.00		Shrub Total	6.73		100.00	
Agsm	0.21	7.43	12.80	50	Agsm	1.48	19.95	33.18	100
Orhy	0.69	24.39	42.08	50	Orhy	0.11	1.49	2.48	15
Pofe	0.61	21.55	37.19	50	Pofe	0.25	3.37	5.60	5
Sihy	0.13	4.60	7.93	15	Pose	2.01	27.09	45.07	100
					Sihy	0.61	8.23	13.67	40
Grass Total	1.64	57.97	100.00		Grass Total	4.46	60.13	100.00	
Alde	0.02	0.70	1.68	20	Aggl	0.02	0.27	0.68	20
Andi	0.20	7.07	16.81	5	Alac	0.03	0.41	1.02	10
Eren	0.04	1.41	3.36	15	Alde	0.44	5.92	14.87	100
Lare	0.01	0.35	0.84	10	Andi	0.13	1.75	4.40	5
Lofo	0.02	0.70	1.68	15	Chat	0.01	0.14	0.34	10
Oppo	0.75	26.51	63.03	10	Cora	0.02	0.27	0.68	20
Phlo	0.09	3.18	7.56	70	Crepis spp.	0.05	0.67	1.68	25
Spco	0.04	1.41	3.36	15	Eren	0.08	1.07	2.70	20
Trgy	0.02	0.70	1.68	15	Lare	0.01	0.14	0.34	10
Forb Total	1.19	42.03	100.00		Lofo	0.01	0.14	0.34	10
Grass and					Oppo	1.58	21.29	53.37	20
Forb Total	2.83	100.00			Phho	0.45	6.06	15.20	15
					Phlo	0.08	1.07	2.70	40
					Trgy	0.05	0.67	1.68	45
					Forb Total	2.96	39.87	100.00	
					Grass and				
					Forb Total	7.42	100.00		

Appendix A

OPPENHIEMER ALLOTMENT - WEST PASTURE

C1-1
Artrr-Agsm Type
SE exp., 1⁰ slope
8 August 1979

C2-1
Artrr-Agsm Type Sprayed
N NE exp. 2⁰ slope
30 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Arsp	.55		.73	10	Artrr	6.90		.95	60
Atga	.20		.27	5	Atco	.33		.05	10
Shrub Total*	.75		100.00		Shrub Total	7.23		100.00	
Agsm	.10	3.05	7.94	25	Agsm	.84	20.79	40.00	70
Pose	.64	19.51	50.79	40	Pose	.81	20.05	38.57	60
Orhy	.47	14.33	37.30	45	Sihy	.16	3.96	7.62	20
Brte	.05	1.52	3.97	5	Orhy	.27	6.68	12.86	15
					Pofe	.02	.50	.95	5
Grass Total	1.26	38.41	100.00		Grass Total	2.10	51.98	100.00	
Alde	.05	1.52	2.48	40	Alde	.26	6.44	13.40	100
Eren	.04	1.22	1.98	15	Phho	.05	1.24	2.58	15
Phlo	.01	.30	.50	5	Lare	.03	.74	1.55	10
Lofo	.03	.91	1.49	5	Oppo	1.38	34.16	71.13	15
Lare	.43	13.11	21.29	70	Eren	.07	1.73	3.61	25
Hagl	.02	.61	.99	20	Aggl	.08	1.98	4.12	10
Arabis spp.	.01	.30	.50	5	Cora	.07	1.73	3.61	30
Gipu	.01	.30	.50	5					
Oppo	1.42	43.29	70.30	20					
Forb Total	2.02	61.59	100.00		Forb Total	1.94	48.02	100.00	
Forb & Grass Total	3.28	100.00			Forb & Grass Total	4.04	100.00		
Bare Ground	91.57			100	Bare Ground	71.84			100
Litter	5.19			100	Litter	24.02			100
Rock	0.00			0	Rock	.03			0

*Big sagebrush cover reduced by winter kill.

Appendix A

OPPENHIEMER ALLOTMENT - WEST PASTURE

C3-1

Artr-Agsm Type-Sprayed

N exp., 0.25° slope

25 July 1975

C4-1

Artr-Agsm Type

N exp., 2° slope

25 July 1975

	Cover %	Comp. %	Comp. %	%		Cover %	Comp. %	Comp. %	%
	Avg.	all G&F	by Group	Freq.		Avg.	all G&F	by Group	Freq.
Artr	4.71			55	Artr	5.53		86.00	75
Shrub Total	4.71				Atco	0.90		14.00	5
Agsm	3.06	58.40	72.85	100	Shrub Total	6.43			
Brte	0.01	0.19	0.23	5	Agsm	0.62	24.04	37.35	80
Orhy	0.21	4.00	5.00	10	Orhy	0.01	0.38	0.60	5
Pose	0.74	14.13	17.62	80	Pose	0.58	22.49	34.94	80
Sihi	0.03	0.58	0.72	5	Sihi	0.10	3.88	6.02	10
Stco	0.15	2.87	3.58	10	Stco	0.35	13.57	21.09	10
Grass Total	4.20	80.17	100.00		Grass Total	1.66	64.36	100.00	
Alde	0.12	2.29	11.54	100	Alde	0.08	3.11	8.70	55
Cora	0.01	0.19	0.96	5	Alte	0.01	0.38	1.08	5
Crepis spp.	0.01	0.19	0.96	10	Anbr	0.01	0.38	1.08	5
Eren	0.02	0.38	1.92	20	Andi	0.01	0.38	1.08	5
Gipu	0.01	0.19	0.96	5	Chat	0.01	0.38	1.08	5
Lare	0.03	0.57	2.89	30	Cora	0.02	0.78	2.18	15
Lofo	0.01	0.19	0.96	5	Crepis spp.	0.02	0.78	2.18	15
Oppo	0.73	13.93	70.20	15	Eren	0.02	0.78	2.18	15
Phho	0.01	0.19	0.96	10	Erov	0.05	1.94	5.44	5
Phlo	0.06	1.14	5.76	40	Gipu	0.01	0.38	1.08	10
Trgy	0.03	0.57	2.89	25	Lare	0.01	0.38	1.08	5
Forb Total	1.04	19.83	100.00		Lofo	0.01	0.38	1.08	10
Grass and					Oppo	0.01	0.38	1.08	5
Forb Total	5.24	100.00			Phho	0.59	22.87	64.14	45
					Phlo	0.02	0.78	2.18	20
					Toin	0.01	0.39	1.09	5
					Trgy	0.03	1.17	3.27	30
					Forb Total	0.92	35.64	100.00	
					Grass and				
					Forb Total	2.58	100.00		

Appendix A

OPPENHIEMER ALLOTMENT - WEST PASTURE

C3-1

Arthr-Agsm Type-Sprayed

N exp., 0.25° slope

1 August 1979

C4-1

Arthr-Agsm Type

N exp., 2° slope

30 July 1979

	Cover % Avg.	Comp. % all G&F by Group	Comp. % by Group	% Freq.		Cover % avg.	Comp. % all G&F by Group	Comp. % by Group	% Freq.
Arthr	5.73			45	Arthr	4.43			50
Shrub Total	5.73				Shrub Total	4.43			
Agsm	1.62	43.43	65.59	85	Pose	.54	25.59	34.18	60
Pose	.32	8.58	12.96	35	Agsm	.69	32.70	43.67	65
Orhy	.38	10.19	15.38	20	Sihy	.10	4.74	6.33	5
Stco	.15	4.02	6.07	10	Stco	.23	10.90	14.56	5
					Orhy	.02	.95	1.27	10
Grass Total	2.47	66.22	100.00		Grass Total	1.58	74.88	100.00	
Aggl	.01	.27	.79	5	Cora	.02	.95	3.77	10
Alde	.16	4.29	12.70	90	Phlo	.31	14.69	58.49	30
Trgy	.01	.27	.79	5	Alde	.14	6.64	26.42	90
Oppo	.86	22.06	68.25	23	Trgy	.01	.47	1.89	5
Lare	.12	3.22	9.52	60	Eren	.02	.95	3.77	15
Phlo	.02	.80	2.38	25	Lare	.01	.47	1.89	5
Eren	.04	1.07	3.17	25	Aggl	.02	.95	3.77	10
Depi	.03	.80	2.38	5					
Forb Total	1.26	33.78	100.00		Forb Total	.53	25.12	100.00	
Grass and Forb Total	3.73	100.00			Grass and Forb Total	2.11	100.00		
Bare Ground	80.39			100	Bare Ground	90.91			100
Litter	15.39			100	Litter	6.98			100
Rock	.03			95	Rock	.05			90

Appendix A

OPPENHIEMER ALLOTMENT - WEST PASTURE

C5-1

Artr-Agsm Type
SE exp., 0.75⁰ slope
17 June 1975

C6-1

Artr-Agsm Type
N NE exp., 1⁰ slope
25 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	6.40			40	Arsp	0.10		1.70	5
Shrub Total	6.40				Artr	5.23		88.95	65
					Atga	0.35		5.95	15
Agsm	0.95	15.11	43.78	95	Chvi	0.20		3.40	5
Brte	0.01	0.16	0.47	10	Shrub Total	5.88		100.00	
Orhy	0.01	0.16	0.47	5	Agsm	1.06	30.38	41.09	70
Pose	0.71	11.29	32.71	80	Orhy	0.27	7.73	10.46	30
Sihi	0.05	0.80	2.30	10	Pose	0.99	28.37	38.38	70
Stco	0.44	7.00	20.27	50	Sihi	0.26	7.44	10.07	30
Grass Total	2.17	34.52	100.00		Grass Total	2.58	73.92	100.00	
Aggl	0.01	0.16	0.25	10	Alde	0.02	0.58	2.20	15
Alde	0.35	5.56	8.49	100	Alte	0.01	0.28	1.09	5
Andi	0.62	9.85	15.04	40	Cora	0.03	0.85	3.29	30
Crepis spp.	0.01	0.16	0.25	10	Crepis spp.	0.01	0.28	1.09	10
Eren	0.02	0.32	0.49	15	Eren	0.04	1.15	4.40	35
Erov	0.13	2.06	3.15	10	Lofe	0.01	0.28	1.09	10
Lare	0.01	0.16	0.25	5	Oppo	0.43	12.33	47.26	10
Lofe	0.02	0.32	0.49	15	Phho	0.26	7.45	28.58	35
Oppo	2.30	36.56	55.82	40	Phlo	0.08	2.30	8.80	80
Phho	0.58	9.22	14.07	40	Trgy	0.02	0.58	2.20	20
Phlo	0.05	0.79	1.21	30	Forb Total	0.91	26.08	100.00	
Trgy	0.02	0.32	0.49	15	Grass and Forb Total	3.49	100.00		
Forb Total	4.12	65.48	100.00						
Grass and Forb Total	6.29	100.00							

Appendix A

OPPENHIEMER ALLOTMENT - WEST PASTURE

C5-1

Artr-Agsm Type
SE exp., 0.75° slope
1 August 1979

C6-1

Artr-Agsm Type
N NE exp., 1° slope
10 August 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	4.50			20	Atga	2.53			15
Shrub Total	4.50				Shrub Total*	2.53			
Agsm	.71	11.77	28.51	70	Agsm	.53	10.52	16.31	25
Pose	.61	10.12	24.50	50	Pose	1.93	38.29	59.38	75
Stco	1.04	17.25	41.77	35	Orhy	.78	15.48	24.00	45
Sihiy	.13	2.16	5.22	5	Sihiy	.01	.20	.31	5
Grass Total	2.49	41.30	100.00		Grass Total	3.25	64.48	100.00	
Phho	.11	1.82	3.11	20	Oppo	1.24	24.60	69.27	20
Alde	.20	3.32	5.65	85	Eren	.19	3.77	10.61	40
Phlo	.03	.50	.85	15	Phlo	.03	.60	1.68	20
Oppo	2.98	49.42	84.18	45	Phho	.01	.20	.56	5
Erov	.10	1.66	2.82	5	Cora	.01	.20	.56	10
Eren	.07	1.16	1.98	20	Alde	.04	.79	2.23	30
Aggl	.04	.66	1.13	15	Alte	.01	.20	.56	5
Lare	.01	.17	.28	5	Lare	.19	3.77	10.61	60
					Arabis spp.	.07	1.39	3.91	15
Forb Total	3.54	58.70	100.00		Forb Total	1.79	35.52	100.00	
Grass and Forb Total	6.03	100.00			Grass and Forb Total	5.04	100.00		
Bare Ground	80.70			100	Bare Ground	88.05			100
Litter	13.23			100	Litter	7.73			100
Rock	.08			85	Rock	0			0

*Big sagebrush cover reduced by winter kill.

Appendix A

OPPENHIEMER ALLOTMENT - WEST PASTURE

C7-1

Arthr-Agsm Type

S exp., 1° slope

17 July 1975

C9-1

Juos Type

S exp., variable slope (3-8°)

25 July 1975

	Cover %	Comp. %	Comp. %	%		Cover %	Comp. %	Comp. %	%
	Avg.	all	by Group	Freq.		Avg.	all	by Group	Freq.
Arthr	9.03			90	Arno	9.28		58.26	50
Shrub Total	9.03				Arthr	0.75		4.70	10
					Cemo	5.90		37.04	20
Agsm	0.54	25.24	30.85	60	Shrub Total	15.93		100.00	
Orhy	0.51	23.84	29.15	40	Agsm	0.11	4.79	6.59	25
Pose	0.16	7.48	9.15	30	Agsp	0.64	27.83	38.33	45
Sihy	0.19	8.88	10.85	30	Brte	0.01	0.43	0.59	5
Stco	0.35	16.35	20.00	10	Kocr	0.01	0.43	0.59	5
Grass Total	1.75	81.79	100.00		Pofe	0.73	31.74	43.72	20
Alde	0.09	4.20	23.07	85	Pose	0.17	7.40	10.18	35
Alte	0.01	0.47	2.57	5	Grass Total	1.67	72.62	100.00	
Andi	0.01	0.47	2.57	5	Alde	0.01	0.43	1.59	10
Depi	0.01	0.47	2.57	5	Arfe	0.08	3.48	12.70	15
Eren	0.03	1.40	7.69	30	Assp	0.01	0.43	1.58	10
Phho	0.16	7.47	41.02	15	Aste	0.01	0.43	1.58	5
Phlo	0.05	2.33	12.82	25	Eren	0.02	0.87	3.18	15
Spco	0.01	0.47	2.57	5	Haac	0.08	3.48	12.70	15
Trgy	0.02	0.93	5.12	15	Lare	0.01	0.43	1.58	5
Forb Total	0.39	18.21	100.00		Phho	0.31	13.48	49.21	25
Grass and					Trgy	0.10	4.35	15.88	55
Forb Total	2.14	100.00			Forb Total	0.63	27.38	100.00	
					Grass and				
					Forb Total	2.30	100.00		

Appendix A

OPPENHIEMER ALLOTMENT - WEST PASTURE

C7-1

Artr-Agsm Type
 S exp., 1° slope
 27 July 1979

C9-1

Juos Type
 S exp., variable slope (3-8°)
 1 August 1979

C7-1					C9-1				
Artr-Agsm Type					Juos Type				
S exp., 1° slope					S exp., variable slope (3-8°)				
27 July 1979					1 August 1979				
Cover %	Comp. %	Comp. %	%		Cover %	Comp. %	Comp. %	%	
Avg.	all G&F	by Group	Freq.		Avg.	all G&F	by Group	Freq.	
Artr	7.35				Arno	5.85	.54	30	
					Cemo	4.48	.41	20	
					Artr	.55	.05	10	
Shrub Total	7.35				Shrub Total	10.88	100.00		
Orhy	.54	20.30	27.98	20	Agsp	.63	32.31	42.57	30
Agsm	.58	21.80	30.05	60	Pose	.14	7.18	9.46	20
Sihy	.10	3.76	5.18	10	Pofe	.25	12.82	16.89	5
Pose	.30	11.28	15.54	25	Agsm	.22	11.28	14.86	35
Stco	.41	15.41	21.24	25	Brte	.01	.51	.68	5
					Orhy	.23	11.79	15.54	10
Grass Total	1.93	72.56	100.00		Grass Total	1.48	75.90	100.00	
Alde	.12	4.51	16.44	90	Eren	.07	3.59	14.89	20
Eren	.08	3.01	10.96	10	Phho	.31	15.90	65.96	20
Trgy	.04	1.50	5.48	15	Haac	.01	.51	2.13	5
Phho	.39	14.66	53.42	15	Arfe	.03	1.54	6.38	5
Phlo	.07	2.63	9.59	20	Assp	.03	1.54	6.38	5
Alte	.01	.38	1.37	5	Oeco	.01	.51	2.13	5
Spco	.02	.75	2.74	5	Trgy	.01	.51	2.13	10
Forb Total	.73	27.44	100.00		Forb Total	.47	24.10	100.00	
Grass and					Grass and				
Forb Total	2.66	100.00			Forb Total	1.95	100.00		
Bare Ground	80.94			100	Bare Ground	90.11			100
Litter	15.96			100	Litter	7.90			100
Rock	0.00			0	Rock	.08			90

Appendix A

POWDER RIM ALLOTMENT - PASTURE A

C1-1

Artr-Agsm Type-Sprayed

NE exp., 2° slope

18 June 1975

C2-1

Artr-Agsp Type-Sprayed

NE exp., 1° slope

18 June 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	2.25			5	Atco	0.08			5
Shrub Total	2.25				Shrub Total	0.08			
Agsm	1.44	18.93	20.30	55	Agsp	2.08	37.28	41.69	85
Agsp	2.38	31.28	33.54	50	Orhy	0.31	5.56	6.22	15
Kocr	0.15	1.97	2.13	10	Pofe	0.08	1.44	1.60	5
Orhy	0.50	6.57	7.05	30	Pose	1.51	27.07	30.26	80
Pofe	0.45	5.91	6.34	35	Sihy	0.23	4.13	4.60	25
Pose	1.19	15.63	16.68	60	Stco	0.78	13.98	15.63	45
Sihy	0.13	1.70	1.84	20					
Stco	0.86	11.30	12.12	55	Grass Total	4.99	89.46	100.00	
Grass Total	7.10	93.29	100.00		Alte	0.02	0.35	3.39	15
Alte	0.01	0.14	1.96	10	Chat	0.02	0.35	3.39	15
Chat	0.04	0.52	7.85	40	Ermi	0.16	2.86	27.12	10
Eren	0.01	0.14	1.96	5	Erov	0.03	0.53	5.09	5
Ermi	0.15	1.97	29.42	5	Lare	0.01	0.18	1.69	5
Lare	0.14	1.83	27.45	80	Pefr	0.01	0.18	1.69	5
Pefr	0.01	0.14	1.96	5	Phho	0.23	4.12	38.99	20
Phho	0.05	0.65	9.80	5	Phlo	0.10	1.79	16.95	40
Phlo	0.09	1.18	17.64	50	Sili	0.01	0.18	1.69	10
Sili	0.01	0.14	1.96	5	Forb Total	0.59	10.54	100.00	
Forb Total	0.51	6.71	100.00		Grass and Forb Total	5.58	100.00		
Grass and Forb Total	7.61	100.00							

Appendix A

POWDER RIM ALLOTMENT - PASTURE A

C1-1
Artr-Agsm Type-Sprayed
NE exp., 2⁰ slope
10 July 1979

C2-1
Artr-Agsp Type-Sprayed
NE exp., 1⁰ slope
10 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	2.76		.95	10	Atco	.40			5
Unid	.15		.05	25					
Shrub Total	2.85		100.00		Shrub Total	.40			
Agsm	1.40	14.75	15.70	50	Agsp	1.26	16.09	17.00	60
Pose	3.40	35.83	38.12	85	Stco	2.36	30.14	31.85	60
Kocr	.03	.32	.34	5	Pose	2.93	37.42	39.54	85
Stco	1.95	20.55	21.86	50	Sihy	.01	.13	.13	5
Agsp	1.18	12.43	13.23	30	Orhy	.35	4.47	4.72	5
Pofe	.33	3.48	3.70	5	Agsm	.50	6.39	6.75	15
Orhy	.63	6.64	7.06	25					
Grass Total	8.92	94.00	100.00		Grass Total	7.41	94.64	100.00	
Arnu	.03	.32	5.26	5	Phho	.20	2.55	47.62	15
Phlo	.42	4.43	73.68	60	Ermi	.10	1.28	23.81	5
Lare	.12	1.26	21.05	15	Phlo	.11	1.40	26.19	20
					Chat	.01	.13	2.38	5
Forb Total	.57	6.00	100.00		Forb Total	.42	5.36	100.00	
Grass and Forb Total	9.49	100.00			Grass and Forb Total	7.83	100.00		
Bare Ground	69.39			100	Bare Ground	78.48			100
Litter	20.55			100	Litter	10.98			100
Rock	0.00			0	Rock	.46			35

Appendix A

POWDER RIM ALLOTMENT - PASTURE A

C3-1

Artr-Agsm Type
NE exp., 0.5° slope
18 June 1975

C4-1

Artr-Agsm Type
W exp., 1° slope
18 June 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	12.28			50	Artr	7.73		80.61	30
Shrub Total	12.28				Chvi	1.66		17.31	30
					Koam	0.20		2.08	25
Agsm	0.87	18.32	35.37	80	Shrub Total	9.59		100.00	
Pose	1.16	24.43	47.15	65	Agsm	0.56	17.29	68.30	50
Sihy	0.43	9.06	17.48	20	Pose	0.18	5.56	21.95	15
Grass Total	2.46	51.81	100.00		Sihy	0.08	2.47	9.75	10
Alte	0.01	0.21	0.44	5	Grass Total	0.82	25.32	100.00	
Andi	0.18	3.78	7.87	10					
Arnu	0.03	0.63	1.31	5	Arho	0.30	9.26	12.40	5
Chat	0.01	0.21	0.44	10	Aspu	0.10	3.09	4.14	5
Cora	0.09	1.89	3.93	65	Cora	0.03	0.93	1.24	10
Eren	0.06	1.26	2.61	10	Cyac	0.01	0.30	0.41	10
Erov	0.23	4.84	10.04	25	Eren	0.07	2.17	2.87	25
Oppo	0.08	1.68	3.49	5	Erov	0.15	4.62	6.20	10
Pepr	0.03	0.63	1.31	5	Haac	0.50	15.43	20.67	15
Phho	1.56	32.84	68.12	80	Pepr	0.01	0.30	0.41	5
Trgy	0.01	0.20	0.44	10	Phho	1.25	38.58	51.66	90
Forb Total	2.29	48.19	100.00		Forb Total	2.42	74.68	100.00	
Grass and Forb Total	4.75	100.00			Grass and Forb Total	3.24	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE A

C3-1
Artr-Agsm Type
NE exp., 0.5° slope
11 July 1979

C4-1
Artr-Agsm Type
W exp., 1° slope
11 July 1979

	Cover % Avg.	Comp. % All G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	12.20			35	Artr	8.40		.85	20
					Chvi	1.35		.14	30
					Koam	.18		.01	30
Shrub Total	12.20				Shrub Total	9.93		100.00	
Agsm	1.28	20.51	34.69	85	Agsm	.58	17.47	55.24	55
Pose	2.13	34.13	57.72	70	Pose	.43	12.95	40.95	15
Sihy	.28	4.49	7.59	10	Sihy	.03	.90	2.86	5
					Orhy	.01	.30	.95	5
Grass Total	3.69	59.14	100.00		Grass Total	1.05	31.63	100.00	
Phho	2.02	32.37	79.22	90	Erov	.15	4.52	6.61	10
Pefr	.08	1.28	3.14	5	Phho	1.32	39.76	58.15	75
Erov	.05	.80	1.96	5	Haac	.38	11.45	16.74	15
Eren	.08	1.28	3.14	5	Eren	.07	2.11	3.08	25
Ardi	.06	.96	2.35	10	Arho	.30	9.04	13.22	5
Cora	.15	2.40	5.88	35	Cora	.05	1.51	2.20	10
Trgy	.01	.16	.39	5					
Oppo	.08	1.28	3.14	5					
Unid.	.01	.16	.39	10					
Unid.	.10	.16	.39	5					
Forb Total	2.55	40.86	100.00		Forb Total	2.27	68.37	100.00	
Grass and Forb Total	6.24	100.00			Grass and Forb Total	3.32			
Bare Ground	81.49			100	Bare Ground	86.07			100
Litter	9.82			100	Litter	4.48			100
Rock	0.00			0	Rock	5.25			85

Appendix A

POWDER RIM ALLOTMENT - PASTURE A

C4-2

Artr-Agsm Type
E exp., 2° slope
18 June 1975

C5-1

Artr-Agsm Type
N NW exp., 2° slope
24 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	10.53			50	Artr	11.80			65
Shrub Total	10.53				Shrub Total	11.80			
Agsm	1.01	18.54	33.12	95	Agsm	0.82	34.46	51.57	85
Orhy	0.48	8.81	15.74	30	Orhy	0.18	7.57	11.33	15
Pose	0.63	11.56	20.65	25	Pose	0.46	19.33	28.94	50
Stco	0.93	17.07	30.49	40	Sihi	0.03	1.26	1.88	10
					Stco	0.10	4.20	6.28	5
Grass Total	3.05	55.98	100.00		Grass Total	1.59	66.82	100.00	
Chat	0.02	0.36	0.83	20	Aggl	0.01	0.42	1.27	5
Cora	0.02	0.36	0.83	15	Alte	0.01	0.42	1.27	10
Eren	0.06	1.10	2.50	10	Andi	0.01	0.42	1.27	5
Ermi	0.63	11.55	26.25	25	Aspu	0.03	1.26	3.79	5
Erov	0.05	0.91	2.08	10	Chde	0.01	0.42	1.27	10
Pefr	0.01	0.19	0.42	10	Cora	0.08	3.36	10.12	55
Phho	1.56	28.62	65.00	70	Eren	0.01	0.42	1.27	10
Phlo	0.03	0.55	1.25	5	Haac	0.10	4.20	12.65	5
Sili	0.01	0.19	0.42	10	Pefr	0.01	0.42	1.27	5
Trgy	0.01	0.19	0.42	5	Phho	0.42	17.64	53.17	40
					Phlo	0.10	4.20	12.65	55
Forb Total	2.40	44.02	100.00		Forb Total	0.79	33.18	100.00	
Grass and Forb Total	5.45	100.00			Grass and Forb Total	2.38	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE A

C4-2

Artr-Agsm Type
E exp., 2nd slope
11 July 1979

C5-1

Artr-Agsm Type
N NW exp., 2nd slope
17 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	6.95			30	Artr	6.30			40
Shrub Total	6.95				Shrub Total	6.30			
Agsm	1.02	15.67	27.27	95	Agsm	1.19	35.52	56.40	90
Stco	1.81	27.80	48.40	45	Pose	.60	17.91	28.44	30
Orhy	.35	5.38	9.36	20	Stco	.11	3.28	5.21	10
Pose	.56	8.60	14.97	25	Sihy	.05	1.49	2.37	5
					Orhy	.16	4.78	7.58	10
Grass Total	3.74	57.45	100.00		Grass Total	2.11	62.98	100.00	
Phho	2.20	33.79	79.42	55	Phlo	.09	2.69	7.26	50
Cora	.12	1.84	4.33	20	Phho	.61	18.21	49.19	40
Phlo	.01	.15	.36	5	Eren	.03	.90	2.42	5
Erm1	.40	6.14	14.44	20	Cora	.32	9.55	25.81	80
Eren	.03	.46	1.08	10	Haac	.18	5.37	14.52	5
Aspu	.01	.15	.36	5	Erov	.01	.30	.81	5
Forb Total	2.77	42.54	100.00		Forb Total	1.24	37.02	100.00	
Forb & Grass Total	6.51	100.00			Forb & Grass Total	3.35	100.00		
Bare Ground	79.99			100	Bare Ground	81.70			100
Litter	12.02			100	Litter	14.12			100
Rock	.18			20	Rock	.23			25

Appendix A

POWDER RIM ALLOTMENT - PASTURE A

C6-1
Artr-Agsm Type
NE exp., 2° slope
24 July 1975

C7-1
Artr-Agsp Type
NE E exp., 3.5° slope
23 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	16.83			80	Artr	6.06			30
Shrub Total	16.83				Shrub Total	6.06			
Agsm	0.62	28.71	33.15	65	Agsp	2.16	43.38	77.97	85
Cael	0.01	0.46	0.52	5	Kocr	0.22	4.42	7.95	40
Orhy	0.14	6.49	7.49	20	Orhy	0.10	2.00	3.61	10
Pose	0.40	18.52	21.40	40	Pose	0.26	5.23	9.39	35
Sihy	0.10	4.63	5.35	10	Sihy	0.03	0.60	1.08	10
Stco	0.60	27.78	32.09	25					
Grass Total	1.87	86.59	100.00		Grass Total	2.77	55.63	100.00	
Asdi	0.02	0.93	6.90	15	Aspu	0.01	0.20	0.45	5
Chat	0.01	0.46	3.45	5	Cora	0.01	0.20	0.45	10
Cora	0.04	1.85	13.79	40	Ermi	0.11	2.20	4.98	15
Eren	0.03	1.38	10.34	5	Erpu	0.03	0.60	1.35	25
Gisi	0.01	0.46	3.45	10	Haac	1.53	30.73	69.24	45
Phho	0.16	7.40	55.17	10	Phho	0.51	10.24	23.08	35
Phlo	0.02	0.93	6.90	20	Phlo	0.01	0.20	0.45	5
Forb Total	0.29	13.41	100.00		Forb Total	2.21	44.37	100.00	
Grass and Forb Total	2.16	100.00			Grass and Forb Total	4.98	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE A

C6-1
Artrr-Agsm Type
NE exp., 2° slope
17 July 1979

C7-1
Artrr-Agsp Type
NE E exp., 3.5° slope
13 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artrr	13.31			55	Artrr	4.46			25
Shrub Total	13.31				Shrub Total	4.46			
Agsm	1.09	35.05	40.98	60	Agsp	2.03	34.70	70.00	70
Stco	.63	20.26	23.68	25	Kocr	.26	4.44	8.97	25
Pose	.63	20.26	23.68	35	Pose	.45	7.69	15.52	25
Orhy	.28	9.00	10.53	25	Orhy	.03	.51	1.03	5
Cael	.03	.96	1.13	5	Sihy	.03	.51	1.03	5
					Stco	.10	1.71	3.45	5
Grass Total	2.66	85.53	100.00		Grass Total	2.90	49.57	100.00	
Cora	.18	5.79	40.00	50	Erpu	.04	.68	1.36	20
Asdi	.12	3.86	26.67	25	Haac	1.76	30.09	59.66	35
Phlo	.04	1.29	8.89	15	Phho	.96	16.41	32.54	35
Phho	.11	3.54	24.44	10	Phlo	.01	.17	.34	5
					Unid.	.18	3.08	6.10	15
Forb Total	.45	14.47	100.00		Forb Total	2.95	50.43	100.00	
Forb & Grass Total	3.11	100.00			Forb & Grass Total	5.85	100.00		
Bare Ground	85.04			100	Bare Ground	76.19			100
Litter	9.55			100	Litter	7.20			100
Rock	.03			5	Rock	10.18			75

Appendix A

POWDER RIM ALLOTMENT - PASTURE A

C8-1

Juos Type
E exp., 12° slope
17 July 1979

C8-2

Juos Type
W exp., 8° slope
17 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Juos	15.50		.99	25	Juos	30.50		.97	40
Chna	.10		.01	5	Artr	.90		.03	5
Shrub Total	15.60		100.00		Shrub Total	31.40		100.00	
Pofe	.38	30.65	35.51	20	Agsp	.56	30.43	60.87	40
Agsp	.43	34.68	40.19	20	Pose	.15	8.15	16.30	10
Orhy	.13	10.48	12.15	20	Pofe	.21	11.41	22.83	25
Stco	.08	6.45	7.48	5					
Pose	.05	4.03	4.67	10					
Grass Total	1.07	86.29	100.00		Grass Total	.92	50.00	100.00	
Erum	.04	3.23	23.53	15	Haac	.31	16.85	33.70	20
Asdi	.06	4.84	35.29	15	Asdi	.01	.54	1.09	5
Crfc	.07	5.65	41.18	20	Phlo	.03	1.63	3.26	10
					Arfe	.04	2.17	4.35	15
					Crfc	.46	25.00	50.00	25
					Phau	.01	.54	1.09	5
					Basa	.05	2.72	5.43	5
					Unid.	.01	.54	1.09	5
Forb Total	.17	13.71	100.00		Forb Total	.92	50.00	100.00	
Forb & Grass Total	1.24	100.00			Forb & Grass Total	1.84	100.00		
Bare Ground	76.93			95	Bare Ground	74.67			100
Litter	18.76			100	Litter	21.11			100
Rock	1.70			60	Rock	2.45			75

Appendix A

POWDER RIM ALLOTMENT - PASTURE A

C8-1
Juos Type
E exp., 12° slope
24 July 1975

C8-2
Juos Type
W exp., 8° slope
24 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	1.75		8.15	10	Arno	0.50		1.68	5
Chna	0.10		0.46	5	Juos	29.25		98.32	40
Juos	19.63		91.39	35					
Shrub Total	21.48		100.00		Shrub Total	29.75		100.00	
Agsp	0.16	10.89	17.59	15	Agsm	0.05	2.33	5.00	5
Kocr	0.11	7.49	12.09	10	Agsp	0.43	20.10	43.00	35
Orhy	0.10	6.80	10.98	15	Orhy	0.06	2.80	6.00	15
Pofe	0.38	25.85	41.76	25	Pofe	0.35	16.36	35.00	15
Pose	0.01	0.68	1.09	10	Pose	0.11	5.15	11.00	20
Stco	0.15	10.20	16.49	10	Grass Total	1.00	46.74	100.00	
Grass Total	0.91	61.91	100.00		Arabis spp.	0.01	0.46	0.87	5
Arabis spp.	0.01	0.68	1.78	10	Arfe	0.06	2.80	5.26	15
Asdi	0.02	1.37	3.58	20	Asdi	0.02	0.93	1.75	20
Chde	0.01	0.68	1.78	10	Basa	0.03	1.41	2.64	5
Cora	0.01	0.68	1.78	5	Cora	0.01	0.46	0.87	5
Crfc	0.08	5.44	14.29	15	Crfc	0.45	21.03	39.48	25
Erea	0.01	0.68	1.78	5	Ermi	0.03	1.41	2.64	10
Erum	0.10	6.80	17.86	10	Gisi	0.01	0.46	0.87	5
Gisi	0.01	0.68	1.78	10	Haac	0.02	0.93	1.75	15
PeFr	0.01	0.68	1.78	10	Haar	0.45	21.03	39.48	5
Phho	0.28	19.04	50.03	5	Phau	0.03	1.41	2.64	5
Phlo	0.01	0.68	1.78	5	Phlo	0.02	0.93	1.75	15
Trgy	0.01	0.68	1.78	5	Forb Total	1.14	53.26	100.00	
Forb Total	0.56	38.09	100.00		Grass and Forb Total	2.14	100.00		
Grass and Forb Total	1.47	100.00							

Appendix A

POWDER RIM ALLOTMENT - PASTURE B

C1-1
Atga Type
0° slope
19 June 1975

C2-1
Artr-Agsm Type
S exp., 1.5° slope
19 June 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Atga	15.95		99.69	90	Artr	10.90		99.10	60
Save	0.05		0.31	5	Eula	0.10		0.90	5
Shrub Total	16.00		100.00		Shrub Total	11.00		100.00	
Orhy	0.23	38.34	54.77	20	Agsm	1.74	40.56	54.72	65
Pose	0.13	21.66	30.95	5	Orhy	0.01	0.24	0.31	10
Sihy	0.06	10.00	14.28	10	Pose	0.39	9.10	12.27	40
Grass Total	0.42	70.00	100.00		Stco	1.04	24.25	32.70	45
Lare	0.14	23.34	77.78	60	Grass Total	3.18	74.15	100.00	
Monu	0.02	3.33	11.11	20	Alte	0.06	1.40	5.41	55
Vinu	0.02	3.33	11.11	20	Andi	0.08	1.87	7.20	5
Forb Total	0.18	30.00	100.00		Aspu	0.01	0.23	0.90	5
Grass and Forb Total	0.60	100.00			Chde	0.03	0.69	2.70	30
					Erce	0.05	1.16	4.50	5
					Eren	0.01	0.23	0.90	10
					Erov	0.23	5.37	20.73	20
					Pefr	0.03	0.69	2.70	5
					Phho	0.48	11.19	43.25	25
					Phlo	0.09	2.10	8.11	45
					Spco	0.03	0.69	2.70	10
					Trgy	0.01	0.23	0.90	10
					Forb Total	1.11	25.85	100.00	
					Grass and Forb Total	4.29	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE B

C1-1
Atga Type
0° slope
20 July 1979

C2-1
Artr-Agsm Type
S exp., 1.5° slope
20 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Atga	.31		.79	25	Artr	1.68		.97	25
Save	.08		.21	5	Eula	.05		.03	5
Shrub Total	.39		100.00		Shrub Total	1.73		100.00	
Pose	.13	12.62	35.14	5	Agsm	1.46	46.50	53.48	70
Orhy	.03	2.91	8.11	5	Pose	.25	7.96	9.16	20
Sihy	.21	20.39	56.76	15	Stco	.86	27.39	31.50	50
					Orhy	.13	4.14	4.76	10
					Sihy	.03	.96	1.10	5
Grass Total	.37	35.92	100.00		Grass Total	2.73	86.94	100.00	
Lare	.15	14.56	22.73	15	Cora	.01	.32	2.44	5
Monu	.26	25.24	39.39	20	Erpu	.01	.32	2.44	5
Capu	.20	19.42	30.30	15	Phho	.18	5.73	43.90	10
Hagl	.05	4.85	7.58	10	Phlo	.06	1.91	14.63	15
					Trgy	.01	.32	2.44	5
					Spco	.11	3.50	26.83	20
					Chde	.01	.32	2.44	10
					Eren	.01	.32	2.44	5
					Unid.	.01	.32	2.44	5
Forb Total	.66	64.08	100.00		Forb Total	.41	13.06	100.00	
Forb & Grass Total	1.03	100.00			Forb & Grass Total	3.14	100.00		
Bare Ground	97.09			100	Bare Ground	93.69			100
Litter	1.46			100	Litter	3.08			100
Rock	0.00			0	Rock	.03			0

Appendix A

POWDER RIM ALLOTMENT - PASTURE B

C3-1
Chvi-Orhy Type
NE exp., 1.75⁰ slope
19 June 1975

C4-1
Artr-Cafi Type
S SW exp., 4⁰ slope
19 June 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Atga	0.40		5.99	5	Artr	3.90			20
Chvi	4.15		62.13	80					
Koam	0.20		2.99	10	Shrub Total	3.90			
Magl	1.93		28.89	55					
Shrub Total	6.68		100.00		Agsm	0.34	4.67	4.86	45
					Cael	0.17	2.34	2.43	40
Orhy	0.36	33.65	44.45	55	Cafi	5.05	69.28	72.04	65
Pose	0.29	27.11	35.80	25	Feoc	0.03	0.41	0.42	30
Sihy	0.16	14.92	19.75	15	Hijs	0.13	1.79	1.86	15
					Orhy	0.10	1.37	1.42	5
Grass Total	0.81	75.68	100.00		Pose	0.03	0.41	0.42	10
					Stco	1.16	15.92	16.55	80
Alte	0.04	3.74	15.39	15	Grass Total	7.01	96.19	100.00	
Lare	0.01	0.94	3.84	5					
Phho	0.20	18.70	76.93	20	Aggl	0.01	0.13	3.58	10
Trgy	0.01	0.94	3.84	5	Anbr	0.01	0.13	3.58	5
Forb Total	0.26	24.32	100.00		Cram	0.04	0.55	14.29	35
					Cyac	0.01	0.13	3.58	5
Grass and					Gipu	0.02	0.27	7.10	15
Forb Total	1.07	100.00			Oeco	0.04	0.55	14.29	40
					Phho	0.11	1.51	39.29	10
					Plpa	0.01	0.13	3.58	5
					Spco	0.03	0.41	10.71	10
					Forb Total	0.28	3.81	100.00	
					Grass and				
					Forb Total	7.29	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE B

C3-1
Chvi-Orhy Type
NE exp., 1.75° slope
20 July 1979

C4-1
Artr-Cafi Type
S SW exp., 4° slope
20 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Magl	.19		.05	40	Artr	1.25			25
Chvi	.27		.08	25					
Atga	2.91		.82	20					
Koam	.18		.05	15					
Shrub Total	3.55		100.00		Shrub Total	1.25			
Pose	.28	25.69	26.67	10	Cafi	5.58	76.33	77.07	85
Sihy	.35	32.11	33.33	35	Hija	.33	4.51	4.56	25
Orhy	.38	34.86	36.19	35	Stco	.70	9.58	9.67	35
Agsm	.04	3.67	3.81	15	Agsm	.30	4.10	4.14	30
					Orhy	.28	3.83	3.87	10
					Pose	.05	.68	.69	5
Grass Total	1.05	96.33	100.00		Grass Total	7.24	99.04	100.00	
Phho	.04	3.67	100.00	15	Spco	.05	.68	71.43	10
					Unid.	.01	.14	14.29	5
					Unid.	.01	.14	14.29	10
Forb Total	.04	100.00	100.00		Forb Total	.07	.96	100.00	
Forb & Grass Total	1.09				Forb & Grass Total	7.31	100.00		
Bare Ground	93.25			100	Bare Ground	87.77			100
Litter	2.15			100	Litter	4.93			100
Rock	0.00			0	Rock	0.00			0

Appendix A

POWDER RIM ALLOTMENT - PASTURE B

C5-1
Artr-Agsp Type
N exp., 3° slope
26 June 1975

C6-1
Artr-Agsm Type
N NW exp., 0.5° slope
19 June 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	1.28		47.95	10	Artr	9.05		99.45	65
Atco	0.40		14.98	15	Chvi	0.05		0.55	5
Chvi	0.46		17.22	15					
Eula	0.53		19.85	10	Shrub Total	9.10		100.00	
Shrub Total	2.67		100.00		Agsm	1.19	34.40	50.64	100
Agsm	1.28	19.43	25.15	35	Cael	0.06	1.74	2.55	10
Agsp	2.45	37.18	48.14	65	Orhy	0.69	19.95	29.37	40
Kocr	0.28	4.25	5.50	25	Pose	0.41	11.85	17.44	25
Orhy	0.08	1.22	1.57	15	Grass Total	2.35	67.94	100.00	
Pose	0.95	14.42	18.66	75					
Stco	0.05	0.75	0.98	5	Alte	0.03	0.86	2.70	30
Grass Total	5.09	77.26	100.00		Chat	0.01	0.28	0.91	10
Assp	0.15	2.27	10.00	10	Cyac	0.01	0.28	0.91	5
Erml	0.50	7.58	33.33	20	Depi	0.01	0.28	0.91	5
Erpu	0.11	1.66	7.33	65	Erov	0.18	5.20	16.22	10
Phho	0.74	11.23	49.34	45	Lare	0.01	0.28	0.91	5
Forb Total	1.50	22.74	100.00		Phho	0.80	23.13	72.03	40
Grass and					Spco	0.06	1.73	5.41	15
Forb Total	6.59	100.00			Forb Total	1.11	32.05	100.00	
					Grass and				
					Forb Total	3.46	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE B

C5-1

Artr-Agsp Type
N exp., 3° slope
18 July 1979

C6-1

Artr-Agsm Type
N NW exp., 0.5° slope
24 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Eula	.75		.54	10	Artr	6.60		.99	25
Atco	.25		.18	5	Chvi	.03		.01	5
Chvi	.40		.28	5					
Shrub Total	1.40		100.00		Shrub Total	6.63		100.00	
Agsm	1.43	16.46	25.90	30	Agsm	1.21	32.27	46.18	85
Pose	.90	10.36	16.30	50	Pose	1.00	26.67	38.17	50
Agsp	2.13	24.51	38.59	60	Orhy	.41	10.93	15.65	30
Orhy	.31	3.57	5.62	20					
Kocr	.75	8.63	13.59	25					
Grass Total	5.52	63.52	100.00		Grass Total	2.62	69.87	100.00	
Phho	1.19	13.69	37.54	50	Phho	.83	22.13	73.45	35
Erpu	.15	1.73	4.73	40	Lare	.01	.27	.88	5
Assp	.03	.35	.95	5	Spco	.28	7.47	24.78	35
Ermi	.30	3.45	9.46	15	Alte	.01	.27	.88	5
Arabis spp.	1.50	17.26	47.32	5					
Forb Total	3.17	36.48	100.00		Forb Total	1.13	30.13	100.00	
Forb & Grass Total	8.69	100.00			Forb & Grass Total	3.75	100.00		
Bare Ground	70.81			95	Bare Ground	87.02			100
Litter	4.41			95	Litter	9.08			100
Rock	12.93			80	Rock	.03			95

Appendix A

POWDER RIM ALLOTMENT - PASTURE B

C7-1
Arpe Type
W exp., 0.5° slope
19 June 1975

C8-1
Artr-Agsm Type
S exp., 3° slope
26 June 1975

	Cover %	Comp. %	Comp. %	%		Cover %	Comp. %	Comp. %	%
	Avg.	all G&F	by Group	Freq.		Avg.	all G&F	by Group	Freq.
Arpe	9.00		63.25	95	Artr	7.20			50
Atga	0.25		1.75	10					
Chvi	4.98		35.00	85	Shrub Total	7.20			
Shrub Total	14.23		100.00		Agsm	3.55	69.34	83.76	95
Agsm	0.31	8.90	18.03	15	Orhy	0.35	6.83	8.15	5
Orhy	0.42	12.06	24.42	60	Pose	0.39	7.61	9.09	35
Pose	0.76	21.83	44.18	55	Grass Total	4.29	83.78	100.00	
Sihy	0.23	6.60	13.37	25					
Grass Total	1.72	49.39	100.00		Alte	0.02	0.40	2.41	15
Cyac	0.01	0.29	0.57	5	Cora	0.03	0.58	3.61	25
Eren	0.03	0.87	1.70	25	Crfc	0.05	0.98	6.03	5
Lare	0.01	0.29	0.57	5	Lare	0.01	0.19	1.20	5
Oean	0.01	0.29	0.57	5	Phho	0.53	10.36	63.86	30
Pefr	0.01	0.29	0.57	10	Phlo	0.16	3.13	19.28	80
Phho	1.65	47.42	93.75	85	Sein	0.03	0.58	3.61	10
Posa	0.03	0.87	1.70	5	Forb Total	0.83	16.22	100.00	
Trgy	0.01	0.29	0.57	5					
Forb Total	1.76	50.61	100.00		Grass and				
					Forb Total	5.12	100.00		
Grass and									
Forb Total	3.48	100.00							

Appendix A

POWDER RIM ALLOTMENT - PASTURE B

C7-1
Arpe Type
W exp., 0.5° slope
18 July 1979

C8-1
Artr-Agsm Type
S exp., 3° slope
18 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by group	% Freq.
Arpe	6.98		.93	95	Artr	7.00		.99	35
Chvi	.46		.06	25	Atco	.05		.01	5
Atga	.03		.01	10					
Shrub Total	7.47		100.00		Shrub Total	7.05		100.00	
Pose	.70	42.94	63.06	45	Agsm	2.87	49.40	61.06	95
Orhy	.32	19.63	28.83	55	Orhy	1.10	18.93	23.40	20
Sihy	.01	.61	.90	5	Pose	.73	12.56	15.53	40
Agsm	.08	4.91	7.21	10					
Grass Total	1.11	68.10	100.00		Grass Total	4.70	80.90	100.00	
Hagl	.01	.61	1.92	5	Phlo	.20	3.44	18.02	60
Cora	.01	.61	1.92	10	Crfc	.09	1.55	8.11	20
Phho	.32	19.63	61.54	40	Phho	.71	12.22	63.96	25
Eren	.14	8.59	26.92	50	Cora	.11	1.89	9.91	25
Peifr	.01	.61	1.92	10					
Arfe	.03	1.84	5.77	5					
Forb Total	.52	31.90	100.00		Forb Total	1.11	19.10	100.00	
Grass and Forb Total	1.63	100.00			Grass and Forb Total	5.81	100.00		
Bare Ground	95.23			100	Bare Ground	77.97			100
Litter	1.75			100	Litter	8.78			100
Rock	0.00			0	Rock	.18			5

Appendix A

POWDER RIM ALLOTMENT - PASTURE B

C9-1

Artr-Agsm Type
NE exp., 2^o slope
26 June 1975

C10-1

Artr-Agsm Type
SW exp., 0.25^o slope
26 June 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	7.48		97.27	80	Artr	7.33		99.60	55
Atco	0.15		1.95	10	Atco	0.03		0.40	5
Koam	0.06		0.78	10					
Shrub Total	7.69		100.00		Shrub Total	7.36		100.00	
Agsm	0.84	27.46	54.55	65	Agsm	0.58	12.58	40.00	50
Feoc	0.01	0.32	0.64	5	Kocr	0.20	4.33	13.79	5
Orhy	0.13	4.25	8.45	10	Orhy	0.05	1.08	3.45	5
Pose	0.32	10.46	20.78	60	Pose	0.29	6.29	20.00	45
Sihy	0.01	0.32	0.64	10	Sihy	0.13	2.81	8.97	15
Stco	0.23	7.52	14.94	10	Stco	0.20	4.33	13.79	5
Grass Total	1.54	50.33	100.00		Grass Total	1.45	31.42	100.00	
Alde	0.01	0.33	0.66	10	Alte	0.05	1.09	1.58	50
Alte	0.01	0.33	0.66	5	Arabis spp.	0.02	0.44	0.63	15
Andi	0.05	1.63	3.28	5	Aspu	0.11	2.39	3.49	20
Aspu	0.01	0.33	0.66	5	Assp	0.05	1.09	1.58	5
Chde	0.01	0.33	0.66	5	Cora	0.01	0.21	0.31	5
Crepis spp.	0.02	0.65	1.31	15	Erov	0.36	7.81	11.40	35
Eren	0.04	1.30	2.63	15	Erpu	0.09	1.96	2.85	65
Lare	0.04	1.30	2.63	40	Haac	1.43	31.02	45.25	60
Phho	1.31	42.81	86.19	75	Pefr	0.02	0.44	0.63	15
Spco	0.01	0.33	0.66	5	Phho	1.02	22.13	32.28	75
Trgy	0.01	0.33	0.66	5	Forb Total	3.16	68.58	100.00	
Forb Total	1.52	49.67	100.00		Grass and Forb Total	4.61	100.00		
Grass and Forb Total	3.06	100.00							

Appendix A

POWDER RIM ALLOTMENT - PASTURE B

C9-1

Artr-Agsm Type
NE exp., 2° slope
18 July 1979

C10-1

Artr-Agsm Type
SW exp., 0.25° slope
18 July 1979

	Cover %	Comp. %	Comp. %	%		Cover %	Comp. %	Comp. %	%
	Avg.	all	G&F	by Group	Freq.	Avg.	all	G&F	by Group
Artr	5.80			.97	65	Atco	.03		.01
Koam	.15			.02	5	Artr	4.66		.99
Arpe	.06			.01	5				
Shrub Total	6.01			100.00		Shrub Total	4.69		100.00
Agsm	1.13	40.50		62.78	70	Agsm	.54	10.63	33.13
Pose	.18	6.45		10.00	30	Stco	.35	6.89	21.47
Orhy	.22	7.89		12.22	35	Pose	.21	4.13	12.88
Stco	.24	8.60		13.33	10	Sihi	.05	.98	3.07
Sihi	.03	1.08		1.67	10	Orhy	.13	2.56	7.98
						Kocr	.25	4.92	15.34
						Agsp	.10	1.97	6.13
Grass Total	1.80	64.52		100.00		Grass Total	1.63	32.09	100.00
Eren	.10	3.58		10.10	35	Phlo	.01	.20	.29
Phho	.78	27.96		78.79	40	Erov	.20	3.94	5.80
Lare	.04	1.43		4.04	35	Haac	1.63	32.09	47.25
Alte	.01	.36		1.01	5	Phho	1.36	26.77	39.42
Spco	.03	1.08		3.03	5	Erpu	.18	3.54	5.22
Lede	.03	1.08		3.03	25	Cora	.07	1.38	2.03
Forb Total	.99	35.48		100.00		Forb Total	3.45	67.91	100.00
Forb & Grass						Forb & Grass			
Total	2.79	100.00				Total	5.08	100.00	
Bare Ground	93.01				100	Bare Ground	87.63		100
Litter	3.88				100	Litter	6.53		100
Rock	0.00				0	Rock	.48		45

Appendix A

POWDER RIM ALLOTMENT - PASTURE C

C1-1
Artr-Agsm Type
E NE exp., 1.5° slope
18 July 1975

C2-1
Artr-Agsm Type
S SW exp., 2° slope
16 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	6.60		92.31	50	Artr	11.36		82.62	75
Chvi	0.40		5.60	5	Atco	0.40		2.90	10
Eula	0.05		.69	5	Atga	0.89		6.48	15
Koam	0.10		1.40	5	Chvi	1.00		7.28	5
					Grsp	0.10		0.72	5
Shrub Total	7.15		100.00		Shrub Total	13.75		100.00	
Agsm	0.56	26.67	37.09	95	Agsm	0.01	0.90	1.26	5
Orhy	0.34	16.20	22.52	40	Brte	0.22	20.01	27.85	85
Pose	0.36	17.15	23.84	40	Feoc	0.04	3.64	5.07	40
Sihy	0.25	11.91	16.55	25	Orhy	0.41	37.28	51.89	20
Grass Total	1.51	71.93	100.00		Sihy	0.11	10.00	13.93	15
Alde	0.02	0.96	3.38	20	Grass Total	0.79	71.83	100.00	
Andi	0.01	0.47	1.70	5	Alde	0.04	3.64	12.91	35
Crepis spp.	0.01	0.47	1.70	5	Arabis spp.	0.01	0.90	3.22	5
Cyac	0.02	0.96	3.38	20	Copa	0.01	0.90	3.22	5
Eren	0.01	0.47	1.70	10	Erce	0.01	0.90	3.22	5
Erov	0.01	0.47	1.70	5	Eren	0.01	0.90	3.22	5
Pefr	0.01	0.47	1.70	5	Erov	0.08	7.28	25.81	5
Phho	0.44	20.95	74.57	50	Lare	0.02	1.82	6.46	20
Phlo	0.01	0.47	1.70	10	Lepu	0.05	4.55	16.13	5
Trgy	0.05	2.38	8.47	25	Oeco	0.03	2.73	9.68	30
Forb Total	0.59	28.07	100.00		Phho	0.05	4.55	16.13	5
Grass and Forb Total	2.10	100.00			Forb Total	0.31	28.17	100.00	
					Grass and Forb Total	1.10	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE C

C1-1
Artr-Agsm Type
E NE exp., 1.5° slope
26 July 1979

C2-1
Artr-Agsm Type
S SW exp., 2° slope
25 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	1.85		.74	10	Artr	9.60		.77	40
Eula	.08		.03	5	Atco	1.10		.09	10
Chvi	.55		.22	5	Atga	1.05		.08	10
Koam	.01		.01	10	Chvi	.55		.04	5
					Grsp	.10		.01	5
Shrub Total	2.49		100.00		Shrub Total	12.40		100.00	
Agsm	.88	30.88	41.31	95	Orhy	.39	37.50	45.35	40
Pose	.58	20.35	27.23	30	Sihi	.09	8.65	10.47	10
Orhy	.52	18.25	24.41	50	Brte	.36	34.62	41.86	85
Pofe	.15	5.26	7.04	10	Feoc	.02	1.92	2.33	15
Grass Total	2.13	74.74	100.00		Grass Total	.86	82.69	100.00	
Lare	.20	7.02	27.78	55	Lede	.01	.96	5.56	10
Phho	.04	1.40	5.56	20	Lepu	.01	.96	5.56	5
Eren	.22	7.72	30.56	55	Erov	.01	.96	5.56	5
Peifr	.14	4.91	19.44	30	Alde	.07	6.73	38.89	45
Alde	.07	2.46	9.72	60	Lare	.05	4.81	27.78	25
Oppo	.05	1.75	6.94	5	Eren	.01	.96	5.56	5
					Erce	.02	1.92	11.11	15
Forb Total	.72	25.26	100.00		Forb Total	.18	17.31	100.00	
Forb & Grass Total	2.85	100.00			Forb & Grass Total	1.04	100.00		
Bare Ground	93.11			100	Bare Ground	94.40			100
Litter	4.05			100	Litter	4.59			100
Rock	.05			0	Rock	0.00			0

Appendix A

POWDER RIM ALLOTMENT - PASTURE C

C2-2
Artrr-Agsm Type
S SW exp., 2.5° slope
16 July 1975

C3-1
Artrr-Cael Type
S SW exp., 1° slope
18 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artrr	9.59		90.30	65	Artrr	8.85			70
Atco	0.28		2.64	15					
Atga	0.50		4.70	5	Shrub Total	8.85			
Chvi	0.25		2.36	10					
Shrub Total	10.62		100.00		Brte	0.01	0.44	0.53	5
					Cael	0.03	1.33	1.61	10
					Feoc	0.01	0.44	0.53	5
Agsm	1.91	55.20	67.49	60	Orhy	0.33	14.73	17.75	15
Brte	0.05	1.44	1.76	45	Pose	0.50	22.33	26.88	35
Feoc	0.09	2.60	3.18	65	Sihy	0.14	6.25	7.53	30
Orhy	0.31	8.96	10.96	30	Stco	0.84	37.50	45.16	70
Sihy	0.14	4.04	4.94	30					
Stco	0.33	9.54	11.67	20	Grass Total	1.86	83.02	100.00	
Grass Total	2.83	81.78	100.00		Eren	0.03	1.34	7.90	30
					Erov	0.01	0.45	2.63	5
Alde	0.05	1.45	7.94	45	Lare	0.01	0.45	2.63	5
Erov	0.35	10.12	55.56	10	Oppo	0.01	0.45	2.63	5
Lare	0.03	0.86	4.76	30	Phho	0.31	13.84	81.58	30
Oeco	0.04	1.16	6.35	35	Spco	0.01	0.45	2.63	5
Oppo	0.13	3.76	20.63	5					
Phho	0.03	0.87	4.76	5	Forb Total	0.38	16.98	100.00	
Forb Total	0.63	18.21	100.00		Grass and Forb Total	2.24	100.00		
Grass and Forb Total	3.46	100.00							

Appendix A

POWDER RIM ALLOTMENT - PASTURE C

C2-2

Artr-Agsm Type
S SW exp., 2.5° slope
25 July 1979

C3-1

Artr-Cael Type
S SW exp., 1° slope
26 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % By Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	5.13		.95	50	Artr	6.01		.99	50
Atco	.28		.05	10	Cael	.03		.01	5
Shrub Total	5.41		100.00		Shrub Total	6.04		100.00	
Agsm	1.50	40.43	52.08	60	Sihy	.13	3.70	4.47	20
Sihy	.05	1.35	1.74	5	Stco	1.78	50.71	61.17	55
Orhy	.28	7.55	9.72	20	Orhy	.41	11.68	14.09	25
Stco	.96	25.88	33.33	40	Brte	.02	.57	.69	10
Feoc	.04	1.08	1.39	30	Pose	.57	16.24	19.59	45
Brte	.05	1.35	1.74	25					
Grass Total	2.88	77.64	100.00		Grass Total	2.91	82.91	100.00	
Eren	.01	.27	1.20	5	Phho	.48	13.68	80.00	20
Oeco	.10	.27	1.20	5	Eren	.04	1.14	6.67	15
Alde	.04	1.08	4.82	35	Lare	.08	2.28	13.33	20
Lare	.03	.81	3.61	30					
Oppo	.58	15.63	69.88	15					
Erov	.08	2.16	9.64	5					
Lede	.08	2.16	9.64	60					
Forb Total	.83	22.36	100.00		Forb Total	.60	17.09	100.00	
Grass and Forb Total	3.71	100.00			Grass and Forb Total	3.51	100.00		
Bare Ground	91.10			100	Bare Ground	91.40			100
Litter	5.53			100	Litter	4.83			100
Rock	0.00			0	Rock	0.00			0

Appendix A

POWDER RIM ALLOTMENT - PASTURE C

C4-1

 Artr-Stco Type
 S exp., 1° slope
 17 July 1975

C5-1

 Artr-Stco Type
 S exp., 1.5° slope
 17 July 1975

	Cover %	Comp. %	Comp. %	%		Cover %	Comp. %	Comp. %	%
	Avg.	all G&F	by Group	Freq.		Avg.	all G&F	by Group	Freq.
Arsp	0.01		0.10	5	Artr	14.60		99.94	70
Artr	8.68		89.12	45	Chvi	0.01		0.06	5
Atco	0.10		1.03	5					
Chvi	0.95		9.75	15	Shrub Total	14.61		100.00	
Shrub Total	9.74		100.00		Agsm	0.33	9.00	11.15	30
Agsm	0.07	1.99	2.08	30	Feoc	0.05	1.37	1.69	50
Brte	0.01	0.28	0.29	5	Orhy	0.01	0.28	0.33	10
Feoc	0.04	1.14	1.19	40	Pose	0.01	0.28	0.33	5
Orhy	0.18	5.13	5.33	10	Sihy	0.17	4.64	5.75	35
Pose	0.06	1.70	1.77	10	Stco	2.39	65.13	80.75	75
Sihy	0.26	7.40	7.69	35	Grass Total	2.96	80.70	100.00	
Stco	2.76	78.63	81.65	95	Alde	0.10	2.72	14.09	95
Grass Total	3.38	96.27	100.00		Aspu	0.01	0.27	1.40	5
Alde	0.11	3.13	84.62	90	Copa	0.01	0.27	1.41	5
Gipu	0.01	0.28	7.69	5	Eren	0.08	2.18	11.27	60
Oeco	0.01	0.28	7.69	5	Erov	0.10	2.72	14.09	5
Forb Total	0.13	3.69	100.00		Lare	0.01	0.27	1.41	5
Grass and					Maca	0.01	0.27	1.41	5
Forb Total	3.51	100.00			Oeco	0.04	1.08	5.63	35
					Phho	0.30	8.17	42.25	25
					Spco	0.02	0.54	2.81	15
					Trgy	0.03	0.81	4.23	5
					Forb Total	0.71	19.30	100.00	
					Grass and				
					Forb Total	3.67	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE C

C4-1
Artr-Stco Type
S exp., 1° slope
27 July 1979

C5-1
Artr-Stco Type
S exp., 1.5° slope
27 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	6.73		.96	40	Artr	7.55			50
Chvi	.23		.03	5					
ArsP	.01		.01	5					
Shrub Total	6.97		100.00		Shrub Total	7.55			
Stco	4.91	94.24	96.27	95	Feoc	.03	.83	.95	10
Agsm	.03	.58	.59	5	Stco	2.68	74.44	84.81	70
Sihy	.11	2.11	2.16	10	Sihy	.18	5.00	5.70	10
Pose	.05	.96	.98	5	Agsm	.27	7.50	8.54	30
Grass Total	5.10	97.89	100.00		Grass Total	3.16	87.78	100.00	
Alde	.10	1.92	90.91	95	Alte	.01	.28	2.27	5
Unid.	.01	.19	9.09	5	Alde	.08	2.22	18.18	75
Forb Total	.11	2.11	100.00		Eren	.11	3.06	25.00	10
Grass and Forb Total	5.21	100.00			Oeco	.01	.28	2.27	5
Bare Ground	81.36			100	Erov	.05	1.39	11.36	10
Litter	13.19			100	Phho	.15	4.17	34.09	5
Rock	0.00			0	Spco	.02	.56	4.55	10
					Unid.	.01	.28	2.27	5
					Forb Total	.44	12.22	100.00	
					Grass and Forb Total	3.60	100.00		
					Bare Ground	78.40			100
					Litter	16.99			100
					Rock	0.00			0

Appendix A

POWDER RIM ALLOTMENT - PASTURE C

C6-1
 Artr-Agsm Type
 SW exp., 4⁰ slope
 17 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Frequency
Artr	8.13		72.59	40
Atco	1.71		15.27	20
Chvi	1.13		10.09	30
Grsp	0.20		1.79	5
Tenu	0.03		0.26	5
Shrub Total	11.20		100.00	
Agsm	0.94	43.52	52.52	75
Brte	0.02	0.92	1.11	15
Feoc	0.01	0.46	0.55	5
Hija	0.05	2.32	2.80	5
Orhy	0.58	26.86	32.41	30
Pose	0.03	1.39	1.68	10
Stco	0.16	7.41	8.93	25
Grass Total	1.79	82.88	100.00	
Alde	0.01	0.46	2.70	10
Asge	0.02	0.93	5.41	20
Erce	0.01	0.46	2.70	10
Eren	0.01	0.46	2.70	5
Ermi	0.10	4.63	27.03	10
Erov	0.08	3.71	21.63	10
Phho	0.10	4.63	27.03	5
Phlo	0.01	0.46	2.70	5
Oeco	0.01	0.46	2.70	10
Saka	0.01	0.46	2.70	5
Stlo	0.01	0.46	2.70	5
Forb Total	0.37	17.12	100.00	
Grass and Forb Total	2.16	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE C

C6-1
 Artr-Agsm Type
 Sw exp., 4⁰ slope
 27 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Frequency
Artr	6.96		65.72	35
Chvi	.30		28.33	20
Atco	3.23		30.50	15
Grsp	.10		.94	5
Shrub Total	10.59		100.00	
Agsm	.39	24.38	32.77	50
Orhy	.56	35.00	47.06	35
Stco	.13	8.13	10.92	15
Hija	.11	6.88	9.24	10
Grass Total	1.19	74.38	100.00	
Asge	.11	6.88	26.83	15
Alde	.11	6.88	26.83	25
Oeco	.03	1.88	7.32	10
Eren	.01	.63	2.44	5
Erov	.13	8.13	31.71	10
Phho	.02	1.25	4.88	10
Forb Total	.41	25.62	100.00	
Grass and Forb Total	1.60	100.00		
Bare Ground	89.57			100
Litter	8.34			100
Rock	0.00			0

Appendix A

POWDER RIM ALLOTMENT - PASTURE D

C1-1
Artr-Eula-Agsm Type
E exp., 3° slope
18 July 1975

C2-1
Artr-Agsm Type
S exp., 4° slope
22 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	0.58		13.95	20	Artr	3.23		83.68	40
Atga	0.50		12.02	5	Atco	0.50		12.96	5
Chvi	0.28		6.73	15	Atga	0.10		2.59	5
Eula	2.80		67.30	60	Chvi	0.03		0.77	5
Shrub Total	4.16		100.00		Shrub Total	3.86		100.00	
Agsm	0.61	16.32	23.93	75	Agsm	0.96	25.61	35.04	100
Orhy	1.15	30.75	45.09	95	Feoc	0.10	2.67	3.64	75
Pose	0.61	16.32	23.93	65	Orhy	0.09	2.41	3.28	15
Stco	0.18	4.82	7.05	15	Pose	0.19	5.07	6.94	35
Grass Total	2.55	68.21	100.00		Stco	1.40	37.34	51.10	85
Alde	0.03	0.80	2.52	25	Grass Total	2.74	73.10	100.00	
Chde	0.05	1.33	4.20	50	Alde	0.05	1.34	4.95	50
Eren	0.01	0.26	0.84	10	Andi	0.01	0.26	0.99	5
Gipu	0.02	0.53	1.68	20	Eren	0.02	0.53	1.98	15
Lare	0.02	0.53	1.68	15	Gisi	0.01	0.26	0.99	5
Oppo	0.75	20.06	63.03	5	Lare	0.01	0.26	0.99	5
Phho	0.31	8.28	26.05	30	Oeco	0.01	0.26	0.99	5
Forb Total	1.19	31.79	100.00		Oppo	0.58	15.47	57.43	10
Grass and Forb Total	3.74	100.00			Phho	0.16	4.27	15.84	15
					Phlo	0.05	1.34	4.95	30
					Plpa	0.02	0.53	1.98	15
					Posa	0.01	0.26	0.99	5
					Spco	0.07	1.86	6.93	25
					Trgy	0.01	0.26	0.99	5
					Forb Total	1.01	26.90	100.00	
					Grass and Forb Total	3.75	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE D

C1-1
Artr-Eula-Agsm Type
E exp., 3° slope
9 August 1979

C2-1
Artr-Agsm Type
S exp., 4° slope

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Eula	1.86		.67	50	Artr	.16		.18	15
Atga	.85		.30	5	Atco	.75		.82	5
Chvi	.08		.03	5					
Shrub Total	2.79		100.00		Shrub Total	.91		100.00	
Agsm	.28	6.62	13.15	40	Agsm	.94	20.94	31.02	80
Orhy	.76	17.97	35.68	60	Stco	1.42	31.63	46.86	70
Pose	.90	21.28	42.25	50	Pose	.43	9.58	14.19	30
Stco	.19	4.49	8.92	20	Orhy	.21	4.68	6.93	25
					Feoc	.03	.67	.99	25
Grass Total	2.13	50.35	100.00		Grass Total	3.03	67.48	100.00	
Phho	.43	10.17	20.48	10	Phlo	.04	.89	2.74	20
Lare	.04	.95	1.90	20	Alde	.06	1.34	4.11	60
Alde	.06	1.42	2.86	55	Eren	.07	1.56	4.79	35
Oppo	1.50	35.46	71.43	5	Phho	.30	6.68	20.55	20
Eren	.07	1.65	3.33	40	Spco	.09	2.00	6.16	20
					Oppo	.85	18.93	58.22	10
					Oeco	.01	.22	.68	5
					Gisi	.01	.22	.68	5
					Lare	.02	.45	1.37	15
					Arabis spp.	.01	.22	.68	5
Forb Total	2.10	49.65	100.00		Forb Total	1.46	32.52	100.00	
Grass and Forb Total	4.23	100.00			Grass and Forb Total	4.49	100.00		
Bare Ground	94.00			100	Bare Ground	88.36			100
Litter	1.78			100	Litter	7.16			100
Rock	0.00			0	Rock	0.00			0

Appendix A

POWDER RIM ALLOTMENT - PASTURE D

C3-1
Artr-Agsm Type
E NE exp., 1.5° slope
22 July 1975

C4-1
Save-Arsp Type
E exp., 0.25° slope
20 June 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	16.10		95.27	65	Arsp	1.48		35.33	50
Atco	0.60		3.55	5	Atga	0.70		16.70	15
Chvi	0.20		1.18	5	Koam	1.93		46.07	65
					Save	0.08		1.90	10
Shrub Total	16.90		100.00		Shrub Total	4.19		100.00	
Agsm	1.31	62.39	75.29	90	Agsm	0.05	2.16	12.82	5
Pose	0.39	18.58	22.42	55	Feoc	0.01	0.43	2.56	10
Sihy	0.03	1.43	1.72	5	Pose	0.33	14.29	84.62	15
Stco	0.01	0.48	0.57	5					
Grass Total	1.74	82.88	100.00		Grass Total	0.39	16.88	100.00	
Cyac	0.01	0.47	2.78	5	Alde	0.17	7.36	8.86	90
Eren	0.01	0.47	2.78	10	Alte	0.02	0.87	1.04	15
Erov	0.10	4.77	27.77	5	Atwo	0.04	1.74	2.08	40
Gisi	0.01	0.47	2.78	5	Depi	0.02	0.87	1.04	15
Lare	0.01	0.47	2.78	10	Gipu	0.01	0.43	0.52	10
Oeco	0.01	0.47	2.78	5	Lare	0.01	0.43	0.52	10
Phho	0.13	6.20	36.11	15	Lede	0.01	0.43	0.52	5
Phlo	0.06	2.86	16.66	35	Lofo	0.01	0.43	0.52	5
Posa	0.01	0.47	2.78	5	Mopu	0.06	2.60	3.13	10
Trgy	0.01	0.57	2.78	5	Oean	0.01	0.43	0.52	5
					Oeco	0.01	0.43	0.52	5
Forb Total	0.36	17.12	100.00		Oppo	1.55	67.10	80.73	20
Grass and Forb Total	2.10	100.00			Forb Total	1.92	83.12	100.00	
					Grass and Forb Total	2.31	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE D

C3-1
Artr-Agsm Type
E NE exp., 1.5° slope
9 August 1979

C4-1
Save-Arsp Type
E Exp., 0.25° slope
9 August 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % All G&F	Comp. % by Group	% Freq.
Artr	12.46		.99	50	Koam	1.53		.33	65
Chvi	.03		.01	5	Save	1.69		.36	20
					Ars	.98		.21	50
					Atga	.46		.10	20
Shrub Total	12.49		100.00		Shrub Total	4.66		100.00	
Agsm	2.28	75.75	89.41	90	Pose	.10	7.09	100.00	5
Stco	.03	1.00	1.18	10					
Pose	.24	7.97	9.41	25					
Grass Total	2.55	84.72	100.00		Grass Total	.10	7.09	100.00	
Alte	.01	.33	2.17	10	Alde	.06	4.26	4.58	55
Phlo	.02	.66	4.35	15	Oppo	1.20	85.11	91.60	25
Phho	.28	9.30	60.87	25	Dapi	.01	.71	.76	5
Lare	.01	.33	2.17	5	Lede	.02	1.42	1.53	20
Eren	.13	4.32	28.26	40	Oeco	.01	.71	.76	5
Dapi	.01	.33	2.17	10	Oean	.01	.71	.76	5
Forb Total	.46	15.28	100.00		Forb Total	1.31	92.91	100.00	
Grass and Forb Total	3.01	100.00			Grass and Forb Total	1.41	100.00		
Bare Ground	75.91			100	Bare Ground	92.61			100
Litter	20.45			100	Litter	6.22			100
Rock	0.00			0	Rock	0.00			0

Appendix A

POWDER RIM ALLOTMENT - PASTURE D

C5-1

Artr-Agsm Type

0 slope

22 July 1975

C5-2

Artr-Atga-Agsm Type

SW exp., 2.25° slope

22 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	16.98		96.70	75	Artr	3.06		79.07	25
Atco	0.58		3.30	20	Atco	0.51		13.18	10
					Atga	0.30		7.75	10
Shrub Total	17.56		100.00		Shrub Total	3.87		100.00	
Agsm	2.01	41.03	53.61	75	Agsm	3.59	63.66	71.51	95
Orhy	0.60	12.25	16.00	10	Orhy	0.28	4.97	5.58	15
Pose	0.74	15.11	19.73	65	Pose	0.97	17.20	19.33	60
Sihy	0.40	8.17	10.66	40	Sihy	0.18	3.19	3.58	10
Grass Total	3.75	76.56	100.00		Grass Total	5.02	89.02	100.00	
Arabis spp.	0.01	0.20	0.87	5	Aspu	0.03	0.54	4.84	5
Cora	0.07	1.42	6.09	50	Chfr	0.01	0.17	1.61	10
Lare	0.01	0.20	0.87	5	Cora	0.01	0.17	1.61	5
Phho	1.01	20.61	87.83	70	Cyac	0.01	0.17	1.61	5
Phlo	0.04	0.81	3.47	15	Lare	0.01	0.17	1.61	10
Sili	0.01	0.20	0.87	5	Pepr	0.01	0.17	1.61	10
Forb Total	1.15	23.44	100.00		Phho	0.50	8.87	80.65	50
Grass and					Phlo	0.03	0.54	4.84	25
Forb Total	4.90	100.00			Trgy	0.01	0.18	1.62	10
					Forb Total	0.62	10.98	100.00	
					Grass and				
					Forb Total	5.64	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE D

C5-1

Artr-Agsm Type

0 slope

30 July 1979

C5-2

Artr-Atga-Agsm Type

SW exp., 2.25° slope

30 July 1979

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	11.45		.99	40	Artr	.43		.11	10
Atco	.03		.01	5	Atco	3.28		.88	20
					Atga	.02			5
Shrub Total	11.48		100.00		Shrub Total	3.73		100.00	
Agsm	1.80	36.29	55.05	75	Agsm	2.07	40.51	47.37	90
Pose	.89	17.94	27.22	55	Pose	1.88	26.79	43.02	50
Sihy	.15	3.02	4.59	15	Orhy	.35	6.85	8.01	20
Orhy	.43	8.67	13.15	20	Sihy	.07	1.37	1.60	10
Grass Total	3.27	65.93	100.00		Grass Total	4.37	85.51	100.00	
Phho	1.38	27.82	81.66	60	Sili	.01	.20	1.35	10
Cora	.11	2.22	6.51	15	Alte	.01	.20	1.35	5
Phlo	.05	1.01	2.96	5	Phho	.68	13.31	91.89	45
Lare	.01	.20	.59	5	Phlo	.01	.20	1.35	5
Sili	.02	.40	1.18	5	Pefr	.03	.59	4.05	10
Eren	.09	1.81	5.33	15					
Pefr	.03	.60	1.78	5					
Forb Total	1.69	34.07	100.00		Forb Total	.74	14.49	100.00	
Grass and Forb Total	4.96	100.00			Grass and Forb Total	5.11	100.00		
Bare Ground	67.84			100	Bare Ground	86.66			100
Litter	26.49			100	Litter	7.13			100
Rock	.30			30	Rock	1.09			70

Appendix A

POWDER RIM ALLOTMENT - PASTURE D

C6-1
Artr-Agsm Type
E exp., 0.5° slope
22 July 1975

C7-1
Juos Type
S exp., 5.5° slope
22 July 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	11.65			70	Arno	6.95		22.60	35
Shrub Total	11.65				Artr	1.50		4.87	10
Agsm	3.78	59.82	66.32	100	Chvi	0.86		2.79	15
Kocr	0.76	12.03	13.34	30	Juos	12.25		39.83	20
Orhy	0.05	0.79	0.87	5	Putr	9.20		29.91	30
Pofe	0.18	2.85	3.16	15	Shrub Total	30.76		100.00	
Pose	0.77	12.19	13.51	75	Agsm	0.78	32.37	41.49	55
Sihi	0.08	1.26	1.40	15	Agsp	0.53	22.00	28.20	25
Stco	0.08	1.26	1.40	5	Kocr	0.13	5.40	6.92	15
Grass Total	5.70	90.20	100.00		Orhy	0.09	3.74	4.78	15
Aggl	0.01	0.15	1.61	10	Pofe	0.28	11.62	14.90	20
Alde	0.03	0.47	4.83	25	Pose	0.04	1.66	2.12	15
Alte	0.01	0.15	1.61	5	Sihi	0.03	1.25	1.59	5
Cora	0.09	1.43	14.52	65	Grass Total	1.88	78.04	100.00	
Crepis spp.	0.02	0.31	3.22	15	Arfe	0.06	2.49	11.35	10
Cyac	0.01	0.15	1.61	5	Chat	0.02	0.82	3.77	15
Eren	0.15	2.38	24.20	85	Cora	0.02	0.82	3.77	20
Gisi	0.02	0.31	3.22	20	Crepis spp.	0.03	1.25	5.66	25
Lare	0.05	0.80	8.07	50	Crwa	0.01	0.41	1.88	10
Phho	0.10	1.59	16.13	5	Erea	0.08	3.32	15.09	35
Phlo	0.09	1.43	14.52	65	Erum	0.05	2.08	9.43	5
Trgy	0.04	0.63	6.46	40	Gisi	0.02	0.82	3.77	15
Forb Total	0.62	9.80	100.00		Pefr	0.01	0.41	1.88	10
Grass and Forb Total	6.32	100.00			Phho	0.10	4.15	18.87	10
					Posa	0.03	1.24	5.66	30
					Sein	0.01	0.41	1.88	5
					Trgy	0.09	3.74	16.99	45
					Forb Total	0.53	21.96	100.00	
					Grass and Forb Total	2.41	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE D

C6-1
Artr-Agsm Type
E exp., 0.5° slope
10 August 1979

C7-1
Juos Type
S exp., 5.5° slope
10 August 1979

	Cover % Avg.	Comp. % All G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Artr	8.63			50	Putr	7.48		.23	35
					Artr	1.00		.03	10
					Juos	16.20		.50	25
					Arno	7.78		.24	45
Shrub Total	8.63				Shrub Total	32.46		100.00	
Agsm	2.34	50.00	57.35	95	Agsm	.85	35.56	46.20	60
Pose	1.21	25.85	29.66	60	Pose	.19	7.95	10.33	10
Stco	.13	2.78	3.19	10	Pofe	.25	10.46	13.59	5
Pofe	.02	.43	.49	5	Orhy	.55	23.01	29.89	5
Kocr	.38	8.12	9.31	15					
Grass Total	4.08	87.18	100.00		Grass Total	1.84	76.98	100.00	
Lare	.06	1.28	10.00	30	Lare	.04	1.67	7.27	15
Eren	.37	7.91	61.67	40	Arfe	.07	2.93	12.73	15
Phlo	.02	.43	3.33	15	Phho	.03	1.26	5.45	5
Alde	.03	.64	5.00	30	Cora	.08	3.35	14.55	25
Gisi	.01	.21	1.67	10	Pefr	.04	1.67	7.27	10
Cora	.03	.64	5.00	15	Gisi	.02	.84	3.64	15
Phho	.01	.21	1.67	5	Eren	.01	.42	1.82	5
Oppo	.05	1.07	8.33	5	Arabis spp.	.01	.42	1.82	5
Gipu	.02	.43	3.33	10	Erea	.04	1.67	7.27	25
					Erum	.05	2.09	9.09	5
					Erpu	.10	4.18	18.18	5
					Unid.	.03	1.26	5.45	10
					Unid.	.03	1.26	5.45	30
Forb Total	.60	12.82	100.00		Forb Total	.55	23.02	100.00	
Grass and Forb Total	4.68	100.00			Grass and Forb Total	2.39	100.00		
Bare Ground	75.53			100	Bare Ground	59.64			100
Litter	19.75			100	Litter	38.15			100
Rock	0.00			0	Rock	0.00			0

Appendix A

POWDER RIM ALLOTMENT - PASTURE D

C8-1
Atga Type
S exp., 2.25° slope
23 June 1975

C10-1
Atco Type
NE exp., 2° slope
24 June 1975

	Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G&F	Comp. % by Group	% Freq.
Atga	7.01			65	Artr	0.01		0.18	5
Shrub Total	7.01				Atco	3.63		67.35	25
					Eula	1.75		32.47	45
Agsm	0.75	21.62	22.46	20	Shrub Total	5.39		100.00	
Orhy	0.58	16.71	17.36	35					
Pose	0.53	15.27	15.86	30	Brte	0.05	1.96	2.30	45
Sihy	1.48	42.66	44.32	55	Orhy	0.25	9.84	11.52	35
Grass Total	3.34	96.26	100.00		Pose	0.91	35.83	41.94	70
					Stco	0.96	37.80	44.24	80
Chat	0.01	0.28	7.69	10	Grass Total	2.17	85.43	100.00	
Cybu	0.08	2.31	61.54	55					
Lare	0.03	0.87	23.08	30	Alde	0.21	8.27	56.76	90
Vinu	0.01	0.28	7.69	5	Chde	0.01	0.40	2.71	5
Forb Total	0.13	3.74	100.00		Eren	0.05	1.96	13.51	30
					Gipu	0.03	1.18	8.10	25
Grass and					Lare	0.06	2.36	16.21	45
Forb Total	3.47	100.00			Saka	0.01	0.40	2.71	5
					Forb Total	0.37	14.57	100.00	
					Grass and				
					Forb Total	2.54	100.00		

Appendix A

POWDER RIM ALLOTMENT - PASTURE D

C8-1
Atga Type
S exp., 2.25° slope
9 August 1979

C10-1
Atco Type
NE exp., 2° slope
9 August 1979

	Cover %	Comp. %	Comp. %	%		Cover %	Comp. %	Comp. %	%
	Avg.	all G&F	by Group	Freq.		Avg.	all G&F	by Group	Freq.
Atga	3.03			45	Eula	.28		.09	10
					Atco	2.98		.91	10
Shrub Total	3.03				Shrub Total	3.26		100.00	
Orhy	.40	16.00	16.33	20	Stco	.14	8.38	10.07	25
Sihy	.44	17.60	17.96	30	Pose	1.15	68.86	82.73	60
Pose	1.60	64.00	65.31	30	Orhy	.04	2.40	2.88	10
Agsm	.01	.40	.41	10	Brte	.06	3.59	4.32	25
Grass Total	2.45	98.00	100.00		Grass Total	1.39	83.23	100.00	
Arco	.02	.80	40.00	15	Eren	.04	2.40	14.29	10
Lare	.03	1.20	60.00	15	Lare	.05	2.99	17.86	20
					Alde	.17	10.18	60.71	95
					Saka	.01	.60	3.57	5
					Lede	.01	.60	3.57	10
Forb Total	.05	2.00	100.00		Forb Total	.28	16.77	100.00	
Grass and					Grass and				
Forb Total	2.50	100.00			Forb Total	1.67	100.00		
Bare Ground	96.17			100	Bare Ground	92.19			100
Litter	1.15			100	Litter	6.20			100
Rock	.13			20	Rock	0.00			0

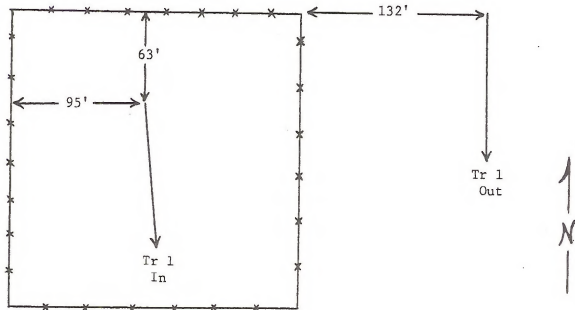
APPENDIX B

Exclosure site descriptions, maps with transect locations, and
summaries of 1975 and 1979 vegetation cover and composition

Grazing Systems Study
 Baggs, Wyoming
 Poison Buttes Allotment
 Exclosure I

Code: 0603
 County: Carbon
 Legal Description: R92W T13N SE $\frac{1}{4}$ Sec 25
 Elevation: 6800
 Slope & Exposure: 3° NE
 Vegetation Type: Big sagebrush - western wheatgrass
 Treatment: Sprayed
 Fence Constructed: Sept., 1967 Livestock exclusion
 Transects Established: Sept., 1967
 Fenceline Photo Stations: From SW corner looking North - fence centered.
 From SW corner looking East - fence centered.
 (Views taken standing on corner cross braces)
 Turn right (N) at cattleguard just off highway
 on main E-W road N of Baggs. Proceed on trail
 N by NW to gate into Poison Butte Allotment.
 At top of bluff, take left hand fork in trail
 and proceed W 1.7 miles. Exclosure lies N of
 trail.

General Location:



Appendix B

POISON BUTTES ALLOTMENT

Exclosure I

Artr-Agsm Type - Sprayed
NE exp., 3° slope

Outside

Inside

28 July 1975

28 July 1975

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	11.43			75	Artr	6.33		99.22	70
Shrub Total	11.43				Chvi	0.05		0.78	5
Agsm	3.36	47.80	55.45	95	Shrub Total	6.38		100.00	
Brte	0.02	0.28	0.33	20	Agsm	3.68	46.47	49.80	100
Kocr	0.51	7.26	8.42	45	Brte	0.01	0.12	0.13	5
Pofe	0.80	11.38	13.20	40	Cael	0.05	0.63	0.67	10
Pose	0.74	10.53	12.21	75	Kocr	0.25	3.15	3.38	35
Sihiy	0.63	8.97	10.39	50	Pofe	1.68	21.22	22.74	65
Grass Total	6.06	86.22	100.00		Pose	0.85	10.74	11.51	95
Alac	0.06	0.85	6.18	60	Sihiy	0.50	6.32	6.77	55
Alde	0.14	2.00	14.44	100	Stco	0.37	4.67	5.00	35
Andi	0.15	2.14	15.47	5	Forb Total	7.39	93.32	100.00	
Arabis spp.	0.01	0.15	1.04	10	Alac	0.04	0.51	7.55	35
Asci	0.05	0.71	5.15	5	Alde	0.05	0.64	9.44	50
Copa	0.06	0.85	6.18	60	Andi	0.03	0.38	5.67	5
Cora	0.07	0.99	7.22	25	Arabis spp.	0.01	0.12	1.88	5
Eren	0.02	0.28	2.06	15	Asci	0.01	0.12	1.88	10
Gypa	0.06	0.85	6.18	55	Asdr	0.01	0.12	1.88	5
Lise	0.02	0.28	2.06	20	Chat	0.01	0.12	1.88	5
Migr	0.07	0.99	7.22	75	Copa	0.01	0.12	1.88	10
Oean	0.06	0.85	6.18	60	Cora	0.04	0.51	7.55	15
Phlo	0.05	0.71	5.15	50	Gypa	0.03	0.38	5.67	30
Posa	0.08	1.14	8.25	75	Lise	0.06	0.75	11.32	60
Trgy	0.07	0.99	7.22	70	Lofo	0.01	0.12	1.88	10
Forb Total	0.97	13.78	100.00		Migr	0.07	0.89	13.21	65
Grass and					Phlo	0.02	0.25	3.77	20
Forb Total	7.03	100.00			Posa	0.10	1.27	18.87	100
					Trgy	0.03	0.38	5.67	25
					Forb Total	0.53	6.68	100.00	
					Grass and				
					Forb Total	7.92	100.00		

Appendix B

POISON BUTTES ALLOTMENT

Exclosure 1

Artr-Agsm Type_o- Sprayed
NE exp., 3 slope

Outside

Inside

2 August 1979

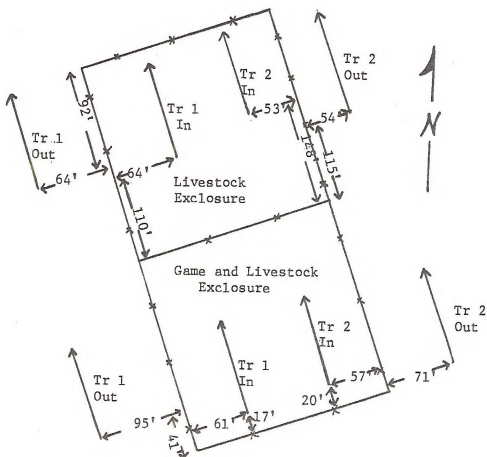
2 August 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	12.02			70	Artr	10.85			45
Shrub Total	12.02				Shrub Total	10.85			
Agsm	2.34	46.15	54.42	95	Agsm	2.24	36.60	40.00	95
Pose	.98	19.33	22.79	35	Pose	.64	10.46	11.43	35
Kocr	.45	8.88	10.47	25	Pofe	1.38	22.55	24.64	60
Pofe	.28	5.52	6.51	10	Sihy	.10	1.63	1.79	10
Sihy	.09	1.78	2.09	10	Kocr	.56	9.15	10.00	35
Stco	.16	3.16	3.72	15	Stco	.68	11.11	12.14	25
Grass Total	4.30	84.82	100.00		Grass Total	5.60	91.50	100.00	
Alde	.10	1.97	12.99	85	Asdr	.13	2.12	25.00	5
Trgy	.02	.39	2.60	20	Cora	.12	1.96	23.03	20
Phlo	.26	5.13	33.77	45	Alde	.04	.65	7.69	40
Cora	.17	3.35	22.08	25	Arabis spp.	.01	.16	1.92	5
Eren	.04	.79	5.19	10	Phho	.02	.33	3.85	20
Andi	.03	.59	3.90	5	Spco	.12	1.96	23.08	10
Posa	.07	1.38	9.09	65	Posa	.03	.49	5.77	30
Oeco	.08	1.58	10.39	75	Oeco	.04	.65	7.69	35
					Alte	.01	.16	1.92	5
Forb Total	.77	15.18	100.00		Forb Total	.52	8.50	100.00	
Forb & Grass Total	5.07	100.00			Forb & Grass Total	6.12	100.00		
Bare Ground	57.12			100	Bare Ground	26.88			100
Litter	37.85			100	Litter	66.72			100
Rock	0.00			0	Rock	0.00			0

Appendix B

Grazing Systems Study
Baggs, Wyoming
Poison Buttes Allotment
Exclosure II

Code Number: 0604
County: Carbon
Legal Description: R92W T13N S1/4 Sec 35
Elevation: 6600
Slope & Exposure: 13° WWS (Game exclosure portion)
Vegetation Type: Juniper - Big sagebrush - Mountain mahogany
Treatments: None
Fence Constructed: October, 1967 Livestock Exclosure
Transects Established: June, 1968
Fenceline Photo Stations: From NE corner looking NW (1)
From NE corner looking SW (2)
From SE corner looking NW (3)
From SE corner looking NE (4)
From SE corner livestock portion looking NW (5)
(Views taken standing on corner cross braces)
General Location: Proceed W on main road from Baggs to top of bluffs.
Take first gaswell road to right, proceed N past gaswell and take middle fork in trail to top of juniper covered ridge. Exclosure 3/4 mile N of gaswell and approximately 100 ft. W of trail.



Appendix B

POISON BUTTES ALLOTMENT

Exlclosure II

Game & Livestock Exclusion Part
Juos Type
W WS exp., 13⁰ slope

Outside Tr. 1

Outside Tr. 2

8 July 1975

8 July 1975

	Cover %	Comp. % all G & F	Comp. % by Group	% Freq.		Cover %	Comp. % all G & F	Comp. % by Group	% Freq.
	Avg.					Avg.			
Arno	5.20		9.86	45	Arno	1.33		3.21	30
Juos	47.50		90.14	60	Cemo	0.10		0.25	5
Shrub Total	52.70		100.00		Juos	40.00		96.54	40
Agsp	0.88	29.44	43.35	55	Shrub Total	41.43		100.00	
Brte	0.02	0.67	0.98	15	Agsp	0.38	14.17	28.15	20
Cafi	0.16	5.36	7.88	10	Hija	0.01	0.37	0.74	5
Kocr	0.23	7.70	11.34	30	Kocr	0.03	1.11	2.22	5
Orhy	0.13	4.35	6.40	25	Orhy	0.54	20.14	40.01	30
Pofe	0.55	18.40	27.10	25	Pofe	0.18	6.71	13.33	10
Pose	0.06	2.01	2.95	15	Pose	0.21	7.83	15.55	25
Grass Total	2.03	67.93	100.00		Grass Total	1.35	50.33	100.00	
Alde	0.01	0.33	1.04	5	Alde	0.02	0.74	1.50	20
Arabis spp.	0.01	0.33	1.04	10	Arfe	0.19	7.09	14.29	25
Arfe	0.04	1.33	4.16	20	Copa	0.01	0.38	0.75	10
Asdi	0.03	1.01	3.13	30	Crfc	0.05	1.87	3.76	5
Chat	0.01	0.33	1.04	5	Crwa	0.02	0.74	1.50	20
Chfr	0.01	0.33	1.04	5	Depi	0.01	0.38	0.75	10
Cora	0.03	1.01	3.13	30	Erum	0.20	7.47	15.04	5
Crwa	0.01	0.33	1.04	5	Gisi	0.03	1.11	2.26	25
Erea	0.01	0.33	1.04	5	Haac	0.53	19.78	39.85	15
Gisi	0.02	0.66	2.08	20	Lare	0.01	0.38	0.75	10
Lare	0.01	0.33	1.04	5	Oppo	0.01	0.38	0.75	10
Oppo	0.55	18.40	57.30	15	Phau	0.01	0.38	0.75	5
Phho	0.18	6.03	18.76	25	Phho	0.22	8.21	16.55	30
Phlo	0.02	0.66	2.08	15	Phlo	0.01	0.38	0.75	5
Trgy	0.01	0.33	1.04	10	Trgy	0.01	0.38	0.75	5
Unid.	0.01	0.33	1.04	5	Forb Total	1.33	49.67	100.00	
Forb Total	0.96	32.07	100.00		Grass and Forb Total	2.68	100.00		

Appendix B

POISON BUTTES ALLOTMENT

Exclosure II

Game & Livestock Exclusion Part

Juos Type

W WS exp., 13° slope

Outside Tr. 1

Outside Tr. 2

3 August 1979

3 August 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Juos	35.60		94.31	60	Juos	39.50		98.31	40
Arno	1.95		5.19	35	Cemo	.03		.07	5
					Arno	.65		1.62	15
Total Shrub	37.55		100.00		Total Shrub	40.18		100.00	
Agsp	.81	37.67	52.60	60	Agsp	.38	16.45	34.55	20
Orhy	.23	10.70	14.94	10	Orhy	.58	25.11	52.73	10
Cafi	.10	4.65	6.49	5	Pose	.14	6.06	12.73	20
Pose	.11	5.12	7.14	20					
Pofe	.18	8.37	11.69	15					
Kocr	.11	5.12	7.14	20					
Grass Total	1.54	71.60	100.00		Grass Total	1.10	47.62	100.00	
Oppo	.35	16.28	57.38	15	Phho	.21	9.09	17.36	20
Asdi	.05	2.33	8.20	20	Arfe	.14	6.06	11.57	20
Phlo	.01	.47	1.64	10	Haac	.68	29.44	56.20	20
Phho	.07	3.26	11.48	15	Alde	.04	1.73	3.31	35
Lare	.01	.47	1.64	10	Lare	.03	1.30	2.48	10
Arfe	.05	2.33	8.20	25	Phlo	.01	.43	.83	5
Cora	.01	.47	1.64	10	Erum	.05	2.16	4.13	5
Trgy	.01	.47	1.64	5	Erov	.01	.43	.83	5
Erum	.04	1.86	6.56	25	Pefr	.04	1.73	3.31	15
Unid.	.01	.47	1.64	10					
Forb Total	.61	28.40	100.00		Forb Total	1.21	52.38	100.00	
Forb and Grass Total	2.15	100.00			Forb and Grass Total	2.31	100.00		
Bare Ground	54.29			90	Bare Ground	68.60			100
Litter	43.57			100	Litter	26.76			100
Rock	0.00			0	Rock	1.70			40

Appendix B

POISON BUTTES ALLOTMENT

Exclosure II

Game & Livestock Exclusion Part

Juos Type

W WS exp., 13° slope

Inside Tr. 1

Inside Tr. 2

8 July 1975

8 July 1975

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Arno	1.75		10.90	20	Arno	1.40		5.15	10
Cemo	3.30		20.56	10	Cemo	4.80		17.65	15
Juos	11.00		68.54	15	Juos	21.00		77.20	30
Shrub Total	16.05		100.00		Shrub Total	27.20		100.00	
Agsp	0.69	27.94	44.81	55	Agsm	0.19	7.60	12.17	25
Brte	0.01	0.40	0.64	5	Agsp	0.02	0.80	1.28	15
Cafi	0.43	17.41	27.93	15	Brte	0.01	0.40	0.64	5
Pofe	0.33	13.36	21.43	10	Cafi	0.25	10.00	16.03	5
Pose	0.08	3.23	5.19	10	Orhy	0.48	19.20	30.77	20
Grass Total	1.54	62.34	100.00		Pofe	0.38	15.20	24.36	15
Alde	0.04	1.62	4.31	35	Pose	0.23	9.20	14.75	15
Arfe	0.10	4.05	10.76	30	Grass Total	1.56	62.40	100.00	
Asdi	0.01	0.40	1.07	5	Alde	0.01	0.40	1.06	5
Aste	0.03	1.21	3.22	5	Alte	0.01	0.40	1.06	5
Crepis spp.	0.01	0.40	1.07	5	Asdi	0.02	0.80	2.13	15
Crfc	0.11	4.46	11.83	15	Aste	0.01	0.40	1.06	5
Erum	0.13	5.27	13.98	10	Chfr	0.02	0.80	2.13	20
Gisi	0.03	1.21	3.22	25	Crfc	0.06	2.40	6.39	15
Haac	0.05	2.03	5.38	5	Crwa	0.02	0.80	2.13	20
Oppo	0.25	10.13	26.89	5	Depi	0.01	0.40	1.06	5
Phau	0.01	0.40	1.07	5	Erum	0.55	22.00	58.52	20
Phho	0.15	6.08	16.13	40	Gisi	0.02	0.80	2.13	15
Trgy	0.01	0.40	1.07	5	Lare	0.01	0.40	1.06	5
Forb Total	0.93	37.66	100.00		Oppo	0.18	7.20	19.15	5
Grass and					Phlo	0.01	0.40	1.06	5
Forb Total	2.47	100.00			Trgy	0.01	0.40	1.06	10
					Forb Total	0.94	37.60	100.00	
					Grass and				
					Forb Total	2.50	100.00		

Appendix B

POISON BUTTES ALLOTMENT

Exclosure II

Game & Livestock Exclusion Part

Juos Type
W WS exp., 13° slope

Inside Tr. 1

Inside Tr. 2

3 August 1979

3 August 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Juos	10.00		72.94	10	Juos	21.00		84.63	25
Cemo	1.90		13.86	5	Cemo	3.26		12.98	15
Arno	1.81		13.20	25	Arno	.85			15
Shrub Total	13.71		100.00		Shrub Total	25.11		100.00	
Agsp	.88	33.33	49.72	45	Orhy	.50	23.70	29.07	10
Pofe	.43	16.29	24.29	15	Pofe	.80	37.91	46.51	20
Cafi	.45	17.05	25.42	10	Pose	.13	6.16	7.56	5
Pose	.01	.38	.56	5	Agsp	.06	2.84	3.48	15
					Cafi	.23	10.90	13.37	5
Grass Total	1.77	67.05	100.00		Grass Total	1.72	81.51	100.00	
Oppo	.15	5.68	17.24	5	Oppo	.30	14.22	76.92	5
Erum	.12	4.55	13.79	25	Alde	.01	.47	2.56	10
Phho	.20	7.58	22.99	15	Lare	.01	.47	2.56	5
Alde	.02	.76	2.30	15	Asdi	.04	1.90	10.26	15
Arfe	.16	6.06	18.39	25	PeFr	.02	.95	5.13	20
Asdi	.03	1.14	3.45	15	Depi	.01	.47	2.56	5
Trgy	.01	.38	1.15	5					
Haac	.13	4.92	14.94	10					
Lare	.01	.38	1.15	5					
Asje	.01	.38	1.15	10					
Phau	.03	1.14	3.45	5					
Forb Total	.87	32.95	100.00		Forb Total	.39	18.49	100.00	
Forb and Grass Total	2.64	100.00			Forb and Grass Total	2.11			
Bare Ground	80.37			100	Bare Ground	64.48			95
Litter	16.48			100	Litter	32.25			100
Rock	.50			30	Rock	0			0

Appendix B

POISON BUTTES ALLOTMENT

Exclosure II

Livestock Exclusion Part

Juos Type

E SE exp., 3-13° slope

Outside Tr. 1

Outside Tr. 2

8 July 1975

15 July 1975

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Arno	2.23		7.65	20	Arno	0.45		1.43	10
Artr	4.58		15.70	20	Artr	7.10		22.50	35
Juos	22.35		76.65	40	Juos	24.00		76.07	30
Shrub Total	29.16		100.00		Shrub Total	31.55		100.00	
Agsm	1.03	40.88	44.40	60	Agsp	0.08	4.74	6.96	10
Agsp	0.18	7.15	7.76	10	Brte	0.09	5.33	7.83	20
Brte	0.04	1.58	1.72	20	Cafi	0.01	0.59	0.86	5
Kocr	0.13	5.15	5.60	5	Orhy	0.04	2.37	3.47	20
Orhy	0.23	9.13	9.92	15	Pofe	0.28	16.57	24.35	15
Pofe	0.26	10.32	11.21	20	Pose	0.06	3.56	5.21	15
Pose	0.09	3.57	3.87	20	Sihy	0.58	34.32	50.44	45
Stco	0.36	14.29	15.52	15	Stco	0.01	0.59	0.86	5
Grass Total	2.32	92.07	100.00		Grass Total	1.15	68.07	100.00	
Alde	0.06	2.39	30.00	40	Alde	0.05	2.95	9.26	45
Arfe	0.01	0.39	5.00	10	Arfe	0.01	0.59	1.85	5
Asdi	0.01	0.39	5.00	5	Crfc	0.18	10.65	33.34	10
Chat	0.02	0.80	10.00	20	Crwa	0.01	0.59	1.85	5
Cora	0.01	0.39	5.00	5	Gisi	0.03	1.77	5.55	30
Gisi	0.01	0.39	5.00	5	Phho	0.25	14.79	46.30	10
Lare	0.01	0.39	5.00	10	Trgy	0.01	0.59	1.85	5
Phlo	0.05	1.99	25.00	50	Forb Total	0.54	31.93	100.00	
Trgy	0.02	0.80	10.00	15	Grass and Forb Total	1.69	100.00		
Forb Total	0.20	7.93	100.00						
Grass and Forb Total	2.52	100.00							

Appendix B

POISON BUTTES ALLOTMENT

Enclosure II

Livestock Exclusion Part

Juos Type

ESE exp., 3-13° slope

Outside Tr. 1

7 August 1979

Outside Tr. 2

3 August 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Juos	17.30		80.58	35	Juos	20.50		70.42	25
Artr	3.41		15.88	20	Artr	8.46		29.06	35
Arno	.76		3.54	15	Arno	.15		.52	10
Shrub Total	21.47		100.00		Shrub Total	29.11		100.00	
Orhy	.29	11.84	12.89	20	Sihy	.18	14.52	24.66	20
Stco	.83	33.88	36.89	15	Orhy	.17	13.71	23.29	30
Pose	.38	15.51	16.89	20	Pofe	.10	8.06	13.70	10
Agsm	.61	24.90	27.11	60	Pose	.18	14.52	24.66	20
Kocr	.08	3.27	3.56	5	Cafi	.05	4.03	6.85	5
Pofe	.02	.82	.89	10	Brte	.01	.81	1.37	5
Agsp	.03	1.22	1.33	5	Agsp	.04	3.23	5.48	20
Brte	.01	.41	.44	5					
Grass Total	2.25	91.85	100.00		Grass Total	.73	58.88	100.00	
Alde	.05	2.04	25.00	40	Phho	.13	10.48	25.50	5
Lare	.01	.41	5.00	10	Alde	.05	4.03	9.80	45
Trgy	.01	.41	5.00	5	Lare	.01	.81	1.96	5
Cora	.05	2.04	25.00	5	Eren	.03	2.42	5.88	5
Phlo	.04	1.63	20.00	20	Pefr	.03	2.42	5.88	10
Arfe	.03	1.22	15.00	5	Oeco	.01	.81	1.96	5
Depi	.01	.41	5.00	5	Lepu	.15	12.10	29.41	10
					Andi	.10	8.06	19.61	5
Forb Total	.20	8.15	100.00		Forb Total	.51	41.12	100.00	
Forb & Grass Total	2.45	100.00			Forb & Grass Total	1.24	100.00		
Bare Ground	66.18			100	Bare Ground	58.24			90
Litter	31.33			100	Litter	39.15			95
Rock	0.00			0	Rock	1.30			45

Appendix B

POISON BUTTES ALLOTMENT

Exclosure II

Livestock Exclusion Part

Juos Type

E SE exp., 3-13⁰ slope

Inside Tr. 1

Inside Tr. 2

15 July 1975

15 July 1975

	Cover %	Comp. % all	Comp. % by	%		Cover %	Comp. % all	Comp. % by	%
	Avg.	G & F	Group	Freq.		Avg.	G & F	Group	Freq.
Arno	3.01		13.68	50	Arno	3.50		12.22	15
Artr	10.50		47.70	35	Artr	7.13		24.90	40
Juos	8.50		38.62	10	Juos	18.00		62.88	35
Shrub Type	22.01		100.00		Shrub Total	28.63		100.00	
Agsm	0.19	10.17	12.42	25	Agsm	0.06	3.41	7.80	15
Brte	0.03	1.60	1.96	10	Agsp	0.01	0.56	1.29	5
Cafi	0.03	1.60	1.96	5	Brte	0.02	1.13	2.59	20
Kocr	0.08	4.28	5.22	5	Kocr	0.05	2.85	6.50	5
Orhy	0.01	0.53	0.65	5	Orhy	0.01	0.56	1.29	5
Pofe	0.68	36.37	44.45	20	Pofe	0.23	13.07	29.88	5
Pose	0.19	10.17	12.42	25	Pose	0.08	4.55	10.39	15
Sihi	0.26	13.91	17.00	35	Sihi	0.31	17.62	40.26	35
Stco	0.06	3.21	3.92	10					
Grass Total	1.53	81.84	100.00		Grass Total	0.77	43.75	100.00	
Alde	0.07	3.75	20.59	70	Alde	0.10	5.69	10.10	55
Arabis spp.	0.01	0.53	2.94	5	Andi	0.03	1.70	3.03	5
Crepis spp.	0.01	0.53	2.94	5	Arabis spp.	0.01	0.56	1.01	10
Crfc	0.01	0.53	2.94	10	Arfe	0.05	2.85	5.05	5
Eren	0.01	0.53	2.94	10	Aste	0.01	0.56	1.01	5
Gara	0.01	0.53	2.94	5	Cacr	0.01	0.56	1.01	5
Gisi	0.02	1.06	5.88	15	Crfc	0.13	7.39	13.13	5
Lare	0.01	0.53	2.94	10	Eren	0.05	2.85	5.05	5
Lupu	0.06	3.21	17.65	10	Gisi	0.03	1.70	3.03	25
Phho	0.13	6.96	38.24	15	Oppo	0.30	17.05	30.30	15
Forb Total	0.34	18.16	100.00		Phho	0.26	14.78	26.27	25
Grass and					Trgy	0.01	0.56	1.01	10
Forb Total	1.87	100.00			Forb Total	0.99	56.25	100.00	
					Grass and				
					Forb Total	1.76	100.00		

Appendix B

POISON BUTTES ALLOTMENT

Exclosure II

Livestock Exclusion Part

Juos Type

ESE exp., 3-13° slope

Inside Tr. 1

Inside Tr. 2

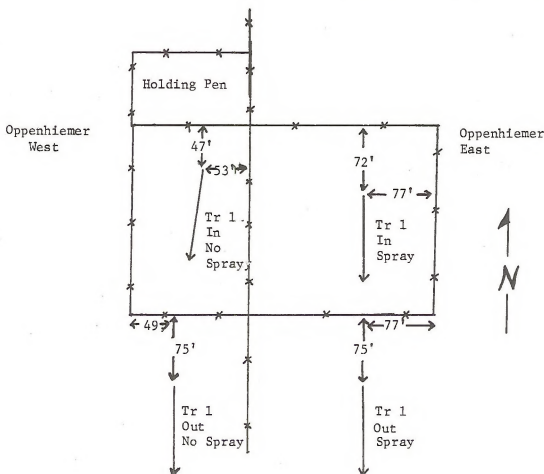
7 August 1979

6 August 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	8.01		48.87	30	Artr	4.20		22.22	30
Arno	1.38		8.42	20	Juos	13.00		68.78	15
Juos	7.00		42.71	10	Arno	1.70		8.99	15
Shrub Total	16.39		100.00		Shrub Total	18.90		100.00	
Sihy	.06	3.61	4.14	10	Agsp	.03	1.64	4.55	5
Stco	.21	12.65	14.48	15	Sihy	.26	14.21	39.39	25
Pofe	.25	15.06	17.24	15	Pose	.06	3.28	9.09	5
Pose	.65	39.16	44.83	15	Agsm	.01	.55	1.52	5
Agsm	.09	5.42	6.21	15	Pofe	.28	15.30	42.42	10
Kocr	.15	9.04	10.34	5	Brte	.01	.55	1.52	5
Brte	.01	.60	.69	5	Orhy	.01	.55	1.52	5
Orhy	.03	1.81	2.07	10					
Grass Total	1.45	87.35	100.00		Grass Total	.66	36.08	100.00	
Asdi	.01	.60	4.76	5	Asdi	.01	.55	.85	5
Depi	.01	.60	4.76	5	Andi	.09	4.92	7.69	5
Phho	.08	4.82	38.10	5	Phho	.50	27.32	42.74	5
Alde	.07	4.22	33.33	40	Alde	.13	7.10	11.11	60
Lare	.02	1.20	9.52	10	Eren	.02	1.09	1.71	10
Eren	.01	.60	4.76	5	Arfe	.05	2.73	4.27	10
Arabis spp.	.01	.60	4.76	5	Oppo	.30	16.39	25.64	10
					Pefr	.06	3.28	5.13	10
					Unid.	.01	.55	.85	5
Forb Total	.21	12.65	100.00		Forb Total	1.17	63.92	100.00	
Forb & Grass Total	1.66	100.00			Forb & Grass Total	1.83	100.00		
Bare Ground	64.91			95	Bare Ground	60.84			100
Litter	32.61			100	Litter	33.90			100
Rock	1.03			60	Rock	4.08			65

Grazing Systems Study
Baggs, Wyoming
Oppenhiemer Allotment
East & West Pastures

Code Number: 0605
County: Carbon
Legal Description: R92W T12N SW $\frac{1}{4}$ Sec 5
Elevation: 6300
Slope & Exposure: 1-3° SE
Vegetation Type: Big sagebrush - western wheatgrass
Treatment: East pasture portion sprayed
Fence Constructed: September, 1967 Livestock exclusion
Transects established: July and September, 1967
Fenceline Photo Stations: From SW corner looking North - fence centered.
From SW corner looking East - fence centered.
From SE corner looking North - fence centered.
From holding Pen SE corner looking West - fence centered.
(Views taken standing on cornercross braces)
General Location: On main road from Baggs, turn E on first trail W of Oppenhiemer E-Oppenhiemer W cattleguard and proceed 3/4 mile E parallel to division fence, crossing gaswell site. Enclosure straddles fenceline.



Appendix B

OPPENHIEMER ALLOTMENT - EAST PASTURE

Exclosure

Artr-Agsm Type - Sprayed
SE exp., 3° slope

Outside

Inside

17 June 1975

17 June 1975

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	6.75		99.55	45	Artr	6.20		98.42	30
Koam	0.03		.45	5	Atco	0.10		1.58	5
Shrub Total	6.78		100.00		Shrub Total	6.30		100.00	
Agsm	1.68	28.71	39.44	100	Agsm	2.03	27.36	37.17	100
Cael	0.73	12.48	17.14	90	Cael	1.21	16.31	22.17	75
Orhy	0.05	.86	1.18	5	Pose	1.64	22.11	30.04	90
Pose	1.60	27.36	37.55	90	Sihy	0.38	5.13	6.95	35
Sihy	0.20	3.42	4.69	20	Stco	0.20	2.70	3.66	5
Grass Total	4.26	72.83	100.00		Grass Total	5.46	73.61	100.00	
Aggl	0.02	0.34	1.26	15	Aggl	0.01	0.13	0.51	10
Alde	0.02	0.34	1.26	15	Alac	0.01	0.13	0.51	10
Alte	0.03	0.52	1.89	5	Alde	0.17	2.30	8.68	70
Anbr	0.01	0.17	0.63	5	Anbr	0.01	0.13	0.51	5
Andi	0.01	0.17	0.63	5	Andi	0.24	3.24	12.25	30
Cora	0.03	0.52	1.89	30	Chat	0.01	0.13	0.51	5
Crepis spp.	0.19	3.24	11.95	15	Cora	0.03	0.40	1.53	10
Eren	0.04	0.68	2.51	20	Crepis spp.	0.01	0.13	0.51	10
Gisi	0.01	0.17	0.63	5	Cyac	0.02	0.27	1.02	20
Lare	0.04	0.68	2.51	35	Lare	0.02	0.27	1.02	15
Oppo	0.60	10.52	37.73	5	Oppo	1.30	17.52	66.32	15
Phho	0.48	8.20	30.18	40	Phho	0.09	1.21	4.59	20
Phlo	0.07	1.19	4.40	30	Phlo	0.01	0.13	0.51	5
Spco	0.01	0.17	0.63	5	Trgy	0.03	0.40	1.53	25
Trgy	0.03	0.52	1.89	25					
Forb Total	1.59	27.16	100.00		Forb Total	1.96	26.39	100.00	
Grass and Forb Total	5.85	100.00			Grass and Forb Total	7.42	100.00		

Appendix B

OPPENHIEMER ALLOTMENT - EAST PASTURE

Exclosure

Artr-Agsm Type - Sprayed
SE exp., 3 slope

Outside

Inside

8 August 1979

8 August 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	5.00			25	Artr	3.73		99.20	35
					Koam	.03		.80	5
Shrub Total	5.00				Shrub Total	3.76		100.00	
Agsm	.74	16.89	24.34	85	Agsm	1.32	28.63	38.71	90
Pose	1.33	30.37	43.75	75	Cael	1.11	24.08	32.55	95
Sihy	.05	1.14	1.64	5	Pose	.95	20.61	27.86	50
Cael	.72	16.44	23.68	85	Orhy	.03	.65	.88	5
Stco	.20	4.57	6.58	5					
Grass Total	3.04	69.40	100.00		Grass Total	3.41	73.97	100.00	
Oppo	1.03	23.52	76.87	10	Eren	.04	.87	3.33	20
Alde	.12	2.74	8.96	80	Phho	.58	12.58	48.33	15
Phho	.01	.23	.75	5	Gisi	.01	.22	.83	10
Cora	.01	.23	.75	5	Lare	.05	1.08	4.17	20
Lare	.09	2.05	6.72	25	Alde	.04	.87	3.33	40
Eren	.06	1.37	4.48	10	Oppo	.35	7.59	29.17	5
Crepis spp.	.02	.46	1.49	10	Cora	.07	1.52	5.83	25
					Erov	.01	.22	.83	5
					Crepis spp.	.05	1.08	4.17	5
Forb Total	1.34	30.60	100.00		Forb Total	1.20	26.03	100.00	
Forb & Grass Total	4.38	100.00			Forb & Grass Total	4.61	100.00		
Bare Ground	83.27			100	Bare Ground	82.44			100
Litter	12.38			100	Litter	13.30			100
Rock	0.00			0	Rock	0.00			0

Appendix B

OPPENHIEMER ALLOTMENT - WEST PASTURE

Exclosure

Artr-Agsm Type - No Spray
E exp., 3rd slope

Outside

Inside

16 June 1975

17 June 1975

	Cover %	Comp. % all G & F	Comp. % by Group	% Freq.		Cover %	Comp. % all G & F	Comp. % by Group	% Freq.
	Avg.					Avg.			
Artr	4.03		99.26	40	Artr	9.40		75.80	45
Atco	0.03		0.74	5	Atco	3.00		24.20	10
Shrub Total	4.06		100.00		Shrub Total	12.40		100.00	
Agsm	0.97	13.79	21.60	75	Agsm	1.90	33.69	44.49	100
Cael	0.06	0.85	1.34	20	Cael	0.34	6.03	7.96	55
Camo	0.35	4.98	7.79	10	Kocr	0.05	0.89	1.18	5
Kocr	0.10	1.43	2.23	5	Pose	1.93	34.22	45.19	90
Orhy	0.08	1.14	1.79	10	Sihy	0.05	0.89	1.18	5
Pose	1.89	26.89	42.09	85					
Sihy	0.01	0.14	0.22	5	Grass Total	4.27	75.72	100.00	
Stco	1.03	14.65	22.94	70					
Grass Total	4.49	63.87	100.00		Aggl	0.06	1.06	4.38	55
					Alde	0.05	0.88	3.65	25
Anbr	0.03	0.42	1.17	25	Anbr	0.02	0.35	1.46	20
Andi	0.09	1.29	3.54	15	Andi	0.15	2.65	10.95	35
Aspu	0.01	0.14	0.39	5	Cora	0.01	0.18	0.73	10
Cora	0.04	0.57	1.57	20	Crepis spp.	0.08	1.41	5.84	35
Cyac	0.03	0.42	1.17	25	Eren	0.17	3.01	12.41	35
Eren	0.08	1.14	3.14	20	Erov	0.03	0.54	2.19	5
Erov	0.05	0.71	1.96	5	Lare	0.03	0.54	2.19	30
Haac	0.60	8.54	23.62	5	Lofo	0.01	0.18	0.73	5
Lare	0.02	0.28	0.78	15	Oppo	0.15	2.65	10.93	5
Oppo	0.85	12.09	33.46	10	Phho	0.51	9.05	37.23	45
Phho	0.61	8.68	24.09	55	Spco	0.03	0.54	2.19	10
Phlo	0.09	1.29	3.54	25	Trgy	0.07	1.24	5.10	30
Trgy	0.04	0.56	1.57	15					
Forb Total	2.54	36.13	100.00		Forb Total	1.37	24.28	100.00	
Grass and Forb Total	7.03	100.00			Grass and Forb Total	5.64	100.00		

Appendix B

OPPENHIEMER ALLOTMENT - WEST PASTURE

Exclosure

Artr-Agsm Type - No Spray
E exp., 30° slope

Outside

8 August 1979

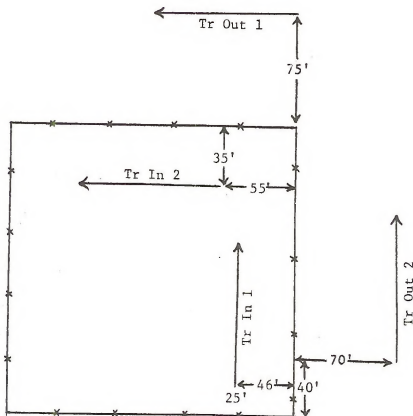
Inside

8 August 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	2.96			30	Artr	6.90		62.73	45
					Atco	4.10		37.27	10
Shrub Total	2.96				Shrub Total	11.00		100.00	
Agsm	.53	9.81	13.80	55	Agsm	1.22	29.54	35.26	95
Cael	.03	.56	.78	10	Pose	1.82	44.07	52.60	75
Pose	1.19	22.04	30.99	65	Cael	.34	8.23	9.83	55
Stco	1.43	26.48	37.24	60	Sihy	.08	1.94	2.31	10
Orhy	.61	11.30	15.89	40					
Kocr	.05	.93	1.30	5					
Grass Total	3.84	71.11	100.00		Grass Total	3.46	83.78	100.00	
Phho	.62	11.48	39.74	45	Phho	.33	7.99	49.25	20
Phlo	.03	.56	1.92	20	Alde	.02	.48	2.99	20
Trgy	.01	.19	.64	5	Eren	.03	.73	4.48	20
Oppo	.70	12.96	44.87	5	Lare	.03	.73	4.48	30
Erov	.05	.93	3.21	5	Oppo	.13	3.15	19.40	5
Cora	.01	.19	.64	5	Cora	.05	1.21	7.46	35
Haac	.07	1.30	4.49	10	Crepis spp.	.08	1.94	11.94	25
Lare	.05	.93	3.21	25					
Spco	.01	.19	.64	5					
Forb Total	1.5	28.89	100.00		Forb Total	.67	16.22	100.00	
Forb & Grass Total	5.40	100.00			Forb & Grass Total	4.13	100.00		
Bare Ground	87.05			100	Bare Ground	81.22			100
Litter	7.32			100	Litter	14.70			100
Rock	.05			90	Rock	0.00			0

Grazing Systems Study
Baggs, Wyoming
Powder Rim Allotment
Pasture A

Code Number: 0408
County: Sweetwater
Legal Description: R95W T13N SW $\frac{1}{4}$ Sec 25
Elevation: 7000
Slope & Exposure: 4° ENE
Vegetation Type: Big sagebrush - Bluebunch wheatgrass
Treatment: Sprayed
Fence Constructed: Aug., 1967 Livestock exclusion
Transects Established: Aug., 1967
Fenceline Photo Stations: From SE corner looking North - fence centered.
From SE corner looking West - fence centered.
(Views taken standing on corner cross braces)
General Location: SE part of Pasture A. From Cherokee Trail, enter Pasture A at gate just W of hay corral and proceed 0.7 mile W on siesmograph trail. Exclosure lies N of trail.



Appendix B

POWDER RIM ALLOTMENT - PASTURE A

Exclosure

Artr-Agsm-Agsp Type - Sprayed
E NE exp., 4⁶ slope

Outside Tr. 1

Outside Tr. 2

23 July 1975

23 July 1975

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	0.05			5	Artr	2.87			55
Shrub Total	0.05				Shrub Total	2.87			
Agsm	2.86	43.21	44.76	95	Agsm	1.84	35.59	41.35	95
Agsp	0.93	14.05	14.56	40	Agsp	0.18	3.49	4.05	15
Cafi	1.18	17.83	18.47	15	Cael	0.16	3.09	3.59	20
Kocr	0.15	2.26	2.34	5	Kocr	0.16	3.09	3.59	25
Orhy	0.21	3.17	3.28	15	Orhy	0.05	0.96	1.12	5
Pofe	0.08	1.20	1.25	5	Pofe	0.45	8.71	10.12	55
Pose	0.36	5.43	5.63	40	Pose	0.58	11.22	13.04	40
Stco	0.62	9.37	9.71	45	Sihy	0.23	4.44	5.16	25
Grass Total	6.39	96.52	100.00		Stco	0.80	15.48	17.98	35
Arfe	0.01	0.15	4.35	5	Grass Total	4.45	86.07	100.00	
Asdi	0.01	0.15	4.35	10	Andi	0.05	0.97	6.95	5
Cyac	0.01	0.15	4.35	5	Arabis spp.	0.01	0.19	1.39	10
Eren	0.01	0.15	4.35	5	Asdi	0.01	0.19	1.39	5
Ermi	0.02	0.31	8.70	20	Aspu	0.03	0.59	4.17	10
Pefr	0.02	0.31	8.70	15	Chat	0.01	0.19	1.38	5
Phho	0.10	1.51	43.47	15	Crfc	0.02	0.38	2.78	15
Phlo	0.05	0.75	21.73	50	Erea	0.03	0.59	4.17	25
Forb Total	0.23	3.48	100.00		Ermi	0.19	3.68	26.39	60
Grass and					Haac	0.10	1.93	13.89	5
Forb Total	6.62	100.00			Pefr	0.01	0.19	1.38	5
					Phho	0.05	0.97	6.95	5
					Phlo	0.20	3.87	27.78	90
					Sein	0.01	0.19	1.38	10
					Forb Total	0.72	13.93	100.00	
					Grass and				
					Forb Total	5.17	100.00		

Appendix B

POWDER RIM ALLOTMENT - PASTURE A

Exclosure

Artr-Agsm-Agsp Type - Sprayed
E NE exp., 4⁰ slope

Outside Tr. 1

Outside Tr. 2

12 July 1979

13 July 1979

Cover % Avg.	Comp. % all G & F	Comp. % by Group	Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.	
				Artr	4.52			25	
				Shrub Total	4.52				
Agsm	1.73	23.35	25.82	95	Agsm	1.38	26.95	33.50	95
Agsp	1.63	22.00	24.33	25	Agsp	.08	1.56	1.94	5
Stco	1.06	14.30	15.82	50	Stco	1.11	21.68	29.94	55
Pose	.55	7.42	8.21	35	Pofe	.45	8.79	10.92	40
Orhy	.18	2.43	2.69	10	Pose	.70	13.67	16.99	45
Cafi	1.45	19.57	21.64	15	Cael	.10	1.95	2.43	15
Kocr	.10	1.35	1.49	5	Kocr	.20	3.91	4.85	15
				Sihy	.10	1.95	2.43	10	
Grass Total	6.70	90.42	100.00		Grass Total	4.12	80.47	100.00	
Haac	.01	.13	1.41	5	Cora	.02	.39	2.00	15
Phho	.30	4.05	42.25	10	Erea	.06	1.17	6.00	35
Phlo	.07	.94	9.86	25	Phlo	.29	5.66	29.00	75
Asdi	.11	1.48	15.49	10	Crfe	.13	2.54	13.00	35
Pefr	.03	.40	4.23	5	Ermi	.40	7.81	40.00	45
Arfe	.04	.54	5.63	15	Haac	.10	1.95	10.00	5
Ermi	.15	2.02	21.13	15					
Forb Total	.71	9.58	100.00		Forb Total	1.00	19.53	100.00	
Grass and Forb Total	7.41	100.00			Grass and Forb Total	5.12	100.00		
Bare Ground	84.28		100		Bare Ground	68.68		100	
Litter	7.38		100		Litter	25.95		100	
Rock	.98		45		Rock	0.00		0	

Appendix B

POWDER RIM ALLOTMENT - PASTURE A

Exclosure

Artr-Agsm-Agsp Type - Sprayed
E NE exp., 4⁰ slope

Inside Tr. 1

Inside Tr. 2

23 July 1975

23 July 1975

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	3.41			25	Artr	4.34			45
Shrub Total	3.41				Shrub Total	4.34			
Agsm	1.96	13.99	41.70	95	Agsm	0.94	18.73	28.65	60
Agsp	0.53	10.01	11.27	30	Agsp	0.62	12.36	18.90	40
Cael	0.02	0.37	0.42	15	Cafi	0.18	3.58	5.48	10
Kocr	0.23	4.34	4.90	10	Kocr	0.23	4.59	7.02	15
Orhy	0.02	0.37	0.42	5	Orhy	0.05	0.99	1.52	5
Pofe	0.96	18.12	20.43	50	Pofe	0.73	14.55	22.26	50
Pose	0.22	4.16	4.69	45	Pose	0.19	3.79	5.80	50
Sihy	0.25	4.72	5.32	25	Stco	0.34	6.78	10.37	40
Stco	0.51	9.63	10.86	40					
Grass Total	4.70	88.70	100.00		Grass Total	3.28	65.37	100.00	
Alte	0.01	0.19	1.67	10	Alte	0.01	0.19	0.57	5
Cora	0.01	0.18	1.66	10	Arabis spp.	0.01	0.19	0.57	5
Crfc	0.01	0.18	1.66	10	Asdi	0.01	0.19	0.57	10
Ermi	0.31	5.85	51.67	60	Chat	0.01	0.19	0.57	5
Phho	0.15	2.84	25.01	5	Cora	0.05	1.00	2.88	30
Phlo	0.09	1.70	15.01	70	Crfc	0.02	0.39	1.14	15
Sein	0.01	0.18	1.66	5	Eren	0.03	0.60	1.73	30
Sili	0.01	0.18	1.66	5	Ermi	0.28	5.58	16.10	50
Forb Total	0.60	11.30	100.00		Erov	0.13	2.59	7.48	5
Grass and Forb Total	5.30	100.00			Haac	0.69	13.75	39.66	35
					Phho	0.35	6.98	20.12	10
					Phlo	0.12	2.40	6.90	80
					Sein	0.01	0.19	0.57	10
					Sili	0.02	0.39	1.14	15
					Forb Total	1.74	34.63	100.00	
					Grass and Forb Total	5.02	100.00		

Appendix B

POWDER RIM ALLOTMENT - PASTURE A

Exclosure

Artr-Agsm-Agsp Type - Sprayed
E NE exp., 4° slope

Inside Tr.1

Inside Tr. 2

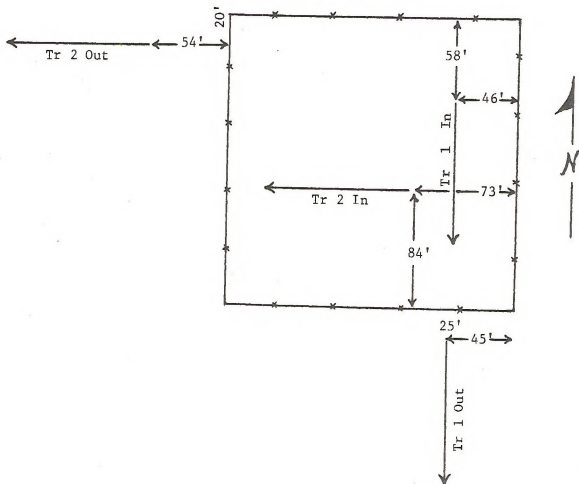
12 July 1979

13 July 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	7.00			35	Artr	5.25			20
Shrub Total	7.00				Shrub Total	5.25			
Agsm	2.73	45.42	53.85	85	Agsm	.66	11.76	17.51	55
Pofe	.23	3.83	4.54	90	Pofe	.50	8.91	13.26	25
Stco	.63	10.48	12.43	70	Stco	.76	13.55	20.16	50
Kocr	.75	12.48	14.79	85	Agsp	1.10	19.61	29.18	40
Agsp	.60	9.98	11.83	70	Cafi	.10	1.78	2.65	10
Pose	.13	2.16	2.56	90	Pose	.30	5.35	7.96	35
					Kocr	.35	6.24	9.28	20
Grass Total	5.07	84.36	100.00		Grass Total	3.77	67.19	100.00	
Phlo	.36	5.99	38.30	65	Unid.	.01	.18	.54	10
Ermi	.49	8.15	52.13	40	Eren	.15	2.67	8.15	15
Phho	.05	.83	5.32	5	Phlo	.17	3.03	9.24	65
Cora	.03	.50	3.19	5	Haac	.88	15.69	47.83	20
Sein	.01	.17	1.06	5	Ermi	.29	5.17	15.76	30
					Phho	.20	3.57	10.87	5
					Cora	.06	1.07	3.26	20
					Asdi	.10	.18	.54	5
					Arabis spp.	.07	1.25	3.80	30
Forb Total	.94	15.64	100.00		Forb Total	1.84	32.80	100.00	
Grass and Forb Total	6.01	100.00			Grass and Forb Total	5.61	100.00		
Bare Ground	39.52			100	Bare Ground	62.94			100
Litter	54.08			100	Litter	29.58			100
Rock	.01			95	Rock	1.45			20

Grazing Systems Study
 Baggs, Wyoming
 Powder Rim Allotment
 Pasture B
 Exclosure I

Code Number: 0409
 County: Sweetwater
 Legal Description: R95W T13N SE $\frac{1}{4}$ Sec 36
 Elevation: 6500
 Slope & Exposure: Flat
 Vegetation type: Big sagebrush - saltbush
 Treatment: None
 Fence constructed: Aug., 1967 Livestock exclusion.
 Transects established: Aug., 1967
 Fenceline Photo Stations: From NE corner looking West - fence centered.
 From NE corner looking South - fence centered.
 From SE corner looking West - fence centered.
 (Views taken standing on corner cross braces)
 General Location: NE part of Pasture B on flats below Powder Rim.
 From Cherokee Trail take road to S just W of hay corral; turn to right at base of Rim. Exclosure 1/8 mile W of B-D cattleguard on S side of road.



Appendix B

POWDER RIM ALLOTMENT - PASTURE B

Exclosure I

Atga & Artr Types
0 slope

Outside Tr. 1

Inside Tr. 1

23 June 1975

23 June 1975

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Arsp	1.05		8.60	15	Artr	18.50		83.04	60
Atga	11.15		91.40	60	Atga	3.78		16.96	30
Shrub Total	12.20		100.00		Shrub Total	22.28		100.00	
Agsm	1.45	45.18	53.31	40	Agsm	1.02	56.67	60.72	80
Orhy	0.13	4.05	4.78	5	Orhy	0.30	16.67	17.86	10
Pose	0.31	9.66	11.40	25	Pose	0.13	7.23	7.73	10
Sihy	0.83	25.85	30.51	25	Sihy	0.23	12.78	13.69	25
Grass Total	2.72	84.74	100.00		Grass Total	1.68	93.35	100.00	
Alte	0.01	0.31	2.04	5	Chat	0.01	0.55	8.33	10
Cyac	0.01	0.31	2.04	5	Cyac	0.01	0.55	8.33	5
Lare	0.01	0.31	2.04	10	Gara	0.01	0.55	8.33	5
Phho	0.45	14.02	91.84	5	Lare	0.03	1.67	25.01	30
Vinu	0.01	0.31	2.04	10	Oean	0.01	0.55	8.33	10
Forb Total	0.49	15.26	100.00		Phho	0.05	2.78	41.67	5
Grass and Forb Total	3.21	100.00			Forb Total	0.12	6.65	100.00	
					Grass and Forb Total	1.80	100.00		

Appendix B

POWDER RIM ALLOTMENT - PASTURE B

Exclosure I

Atga & Artr Types
0° slope

Outside Tr. 1

Inside Tr. 1

23 July 1979

23 July 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Atga	1.13		45.38	40	Atga	3.70			35
Arsp	1.30		52.21	50					
Artr	0.01		.40	5					
Chvi	0.05		2.01	5					
Shrub Total	2.49		100.00		Shrub Total	3.70			
Orhy	0.41	15.02	18.64	15	Agsm	0.98	35.77	54.75	50
Sihy	0.13	4.76	5.91	15	Sihy	0.48	17.52	26.82	35
Pose	0.50	18.32	22.73	20	Orhy	0.03	1.09	1.68	5
Agsm	1.16	42.49	52.73	75	Pose	0.30	10.95	16.76	15
Grass Total	2.20	80.59	100.00		Grass Total	1.79	65.33	100.00	
Phho	0.50	18.31	94.34	35	Phho	0.90	32.85	94.74	5
Sial	0.03	1.10	5.66	5	Sial	0.05	1.82	5.26	25
Forb Total	0.53	19.41	100.00		Forb Total	0.95	34.67	100.00	
Grass and Forb Total	2.73	100.00			Grass and Forb Total	2.74	100.00		
Bare Ground	91.92			100	Bare Ground	94.54			100
Litter	4.46			100	Litter	2.72			100
Rock	0.00			0	Rock	0.00			0

Appendix B

POWDER RIM ALLOTMENT - PASTURE B

Exclosure I

Atga & Artr Types
0 slope

Outside Tr. 2

Inside Tr. 2

23 June 1975

23 June 1975

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Arsp	4.38		39.60	70	Arsp	2.03		15.60	15
Artr	4.55		41.14	10	Artr	10.73		82.48	55
Atga	1.83		16.55	55	Atga	0.25		1.92	10
Chvi	0.30		2.71	5					
Shrub Total	11.06		100.00		Shrub Total	13.01		100.00	
Agsm	1.22	43.89	49.00	60	Agsm	1.63	46.18	50.63	65
Orhy	0.21	7.55	8.43	15	Orhy	0.23	6.52	7.15	20
Pose	0.35	12.59	14.06	10	Pose	1.01	28.62	31.36	50
Sihy	0.71	25.54	28.51	25	Sihy	0.35	9.92	10.86	20
Grass Total	2.49	89.57	100.00		Grass Total	3.22	91.24	100.00	
Chat	0.01	0.36	3.45	5	Alde	0.02	0.57	6.46	15
Cybu	0.01	0.36	3.45	5	Chat	0.02	0.57	6.46	15
Lare	0.01	0.36	3.45	10	Depi	0.01	0.28	3.22	10
Phho	0.26	9.35	89.65	30	Hagl	0.01	0.28	3.22	5
Forb Total	0.29	10.43	100.00		Lare	0.03	0.85	9.68	30
Grass and					Phho	0.20	5.67	64.52	5
Forb Total	2.78	100.00			Saka	0.01	0.28	3.22	5
					Vinu	0.01	0.28	3.22	5
					Forb Total	0.31	8.76	100.00	
					Grass and				
					Forb Total	3.53	100.00		

Appendix B

POWDER RIM ALLOTMENT - PASTURE B

Exclosure I

Atga & Artr Types
O slope

Outside Tr. 2

Inside Tr. 2

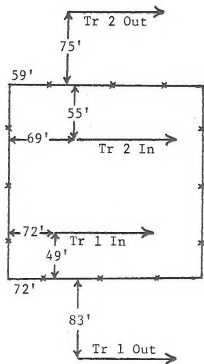
23 July 1979

23 July 1979

	Cover %	Comp. % all G & F	Comp. % by Group	% Freq.		Cover %	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	2.58		86.00	35	Artr	16.01		75.73	40
Atga	.39		13.00	30	Atga	5.13		24.27	30
Arsp	.03		1.00	10					
Shrub Total	3.00		100.00		Shrub Total	21.14		100.00	
Orhy	.48	16.96	17.84	30	Agsm	1.43	59.09	65.60	85
Pose	.90	31.80	33.46	40	Orhy	.40	16.53	18.35	10
Sihy	.15	5.30	5.58	10	Pose	.06	2.48	2.75	10
Agsm	1.16	40.99	43.12	70	Sihy	.29	11.98	13.30	10
Grass Total	2.69	95.05	100.00		Grass Total	2.18	90.08	100.00	
Alde	.02	.71	14.29	20	Phho	.08	3.31	33.33	5
Lare	.02	.71	14.29	15	Lare	.05	2.07	20.83	20
Saka	.01	.35	7.14	5	Sial	.09	3.72	37.50	15
Hagl	.07	2.47	50.00	20	Eren	.01	.41	4.17	5
Depi	.01	.35	7.14	10	Chenopodium spp.	.01	.41	4.17	5
Sial	.01	.35	7.14	10					
Forb Total	.14	4.95	100.00		Forb Total	.24	9.92	100.00	
Grass and Forb Total	2.83	100.00			Grass and Forb Total	2.42	100.00		
Bare Ground	78.10		100		Bare Ground	69.99		100	
Litter	20.78		100		Litter	27.11		100	
Rock	.08		95		Rock	0.00		0	

Grazing Systems Study
 Baggs, Wyoming
 Powder Rim Allotment
 Pasture B
 Exclosure II

Code Number: 0410
 County: Sweetwater
 Legal Description: R95W T12N NW $\frac{1}{4}$ Sec 10
 Elevation: 6500
 Slope & Exposure: 4° S
 Vegetation Type: Juniper
 Treatment: None
 Fence Constructed: Sept., 1967 Game and Livestock exclusion.
 Transects established: June, 1968
 Fenceline Photo Stations: From SW corner looking East - fence centered.
 From SW corner looking North - fence centered.
 (Views taken standing on corner cross braces)
 General Location: Central part of Pasture B. Take road leading S from Cherokee Trail at point where road to Chimney Spring branches off and proceed approximately 2 $\frac{1}{2}$ miles south. Exclosure is 75 ft. E of road in juniper stand on S-facing portion of ridge.



Appendix B

POWDER RIM ALLOTMENT - PASTURE B

Exclosure II

Game & Livestock Exclusion

Juos Type

S exp., 4⁰ slope

Outside Tr. 1

Outside Tr. 2

25 June 1975

25 June 1975

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Arno	0.65		2.48	10	Arno	0.63		2.66	15
Juos	25.55		97.52	50	Juos	23.00		97.34	35
Shrub Total	26.20		100.00		Shrub Total	23.63		100.00	
Agsp	0.26	14.78	89.66	30	Agsp	0.13	3.31	30.24	15
Pose	0.03	1.70	10.34	10	Pose	0.15	3.82	34.88	15
Grass Total	0.29	16.48	100.00		Stco	0.15	3.82	34.88	5
Arfe	0.03	1.70	2.04	5	Grass Total	0.43	10.95	100.00	
Asdi	0.01	0.57	0.68	10	Arfe	0.24	6.11	6.86	30
Cyac	0.01	0.57	0.68	5	Asdi	0.01	0.25	0.28	5
Eren	0.03	1.70	2.04	10	Aspu	0.01	0.25	0.28	5
Ermi	0.03	1.70	2.04	5	Chfr	0.01	0.25	0.28	10
Haac	1.11	63.07	75.52	25	Crfc	0.01	0.25	0.28	5
Pefr	0.01	0.57	0.68	10	Eren	0.03	0.77	0.85	30
Phau	0.01	0.57	0.68	5	Haac	3.04	77.36	86.86	65
Phho	0.23	13.07	15.64	20	Pefr	0.02	0.50	0.58	20
Forb Total	1.47	83.52	100.00		Phho	0.13	3.31	3.72	20
Grass and Forb Total	1.76	100.00			Forb Total	3.50	89.05	100.00	
					Grass and Forb Total	3.93	100.00		

Appendix B

POWDER RIM ALLOTMENT - PASTURE B

Exclosure II

Game & Livestock Exclusion

Juos Type

S. exp., 4⁰ slope

Outside Tr.1

Outside Tr. 2

19 July 1979

19 July 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Juos	24.95		97.65	40	Juos	6.75		92.47	20
Arno	.60		2.35	10	Arno	.55		7.53	10
Shrub Total	25.55		100.00		Shrub Total	7.30		100.00	
Agsp	.33	23.24	54.10	20	Agsp	.16	5.32	36.36	15
Pose	.23	16.20	37.70	10	Pose	.13	4.32	29.55	10
Orhy	.05	3.52	8.20	5	Stco	.15	4.98	34.09	5
Grass Total	.61	42.96	100.00		Grass Total	.44	14.62	100.00	
Eren	.01	.70	1.23	5	Haac	2.04	67.77	79.38	50
Asdi	.03	2.11	3.70	5	Arfe	.13	4.32	5.06	15
Phho	.08	5.63	9.88	10	Eren	.03	1.00	1.17	10
Ermi	.03	2.11	3.70	5	Phho	.18	5.98	7.00	20
Haac	.50	35.21	61.73	15	Aspu	.01	.33	.39	5
Pefr	.03	2.11	3.70	10	Pefr	.01	.33	.39	5
Oppo	.13	9.15	16.05	5	Crfe	.01	.33	.39	5
					Oppo	.15	4.98	5.84	5
					Asdi	.01	.33	.39	5
Forb Total	.81	57.04	100.00		Forb Total	2.57	85.38	100.00	
Forb & Grass Total	1.42	100.00			Forb & Grass Total	3.01	100.00		
Bare Ground	73.48			95	Bare Ground	70.81			95
Litter	21.34			95	Litter	19.55			100
Rock	2.80			75	Rock	6.25			80

Appendix B

POWDER RIM ALLOTMENT - PASTURE B

Exclosure II

Game & Livestock Exclusion

Juos Type

S exp., 4⁰ slope

Inside Tr. 1

Inside Tr. 2

25 June 1975

25 June 1975

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Juos	7.00			15	Arno	0.18		0.62	50
Shrub Total	7.00				Juos	28.75		99.38	10
Agsp	0.11	3.43	73.34	20	Shrub Total	28.93		100.00	
Cafi	0.03	0.93	20.00	5	Agsp	0.21	8.83	67.75	15
Pose	0.01	0.31	6.66	5	Pose	0.10	4.20	32.25	5
Grass Total	0.15	4.67	100.00		Grass Total	0.31	13.03	100.00	
Anbr	0.01	0.31	0.33	5	Arabis spp.	0.01	0.42	0.48	10
Arfe	0.07	2.18	2.28	25	Arfe	0.25	10.50	12.08	30
Asdi	0.01	0.31	0.33	10	Chfr	0.01	0.42	0.48	10
Cacr	0.01	0.31	0.33	5	Crfe	0.01	0.42	0.48	10
Crfe	0.01	0.31	0.33	10	Eren	0.01	0.42	0.48	5
Eren	0.02	0.62	0.65	15	Haac	1.56	65.55	75.37	50
Haac	2.56	79.76	83.66	65	Pefr	0.03	1.26	1.45	5
Oppo	0.35	10.91	11.43	5	Phau	0.01	0.42	0.48	5
Pefr	0.01	0.31	0.33	10	Phho	0.18	7.56	8.70	10
Phau	0.01	0.31	0.33	10					
Forb Total	3.06	95.33	100.00		Forb Total	2.07	86.97	100.00	
Grass and Forb Total	3.21	100.00			Grass and Forb Total	2.38	100.00		

Appendix B

POWDER RIM ALLOTMENT - PASTURE B

EXCLOSURE II

Game & Livestock Exclusion

Juos Type

S. exp., 4⁰ slope

Inside Tr. 1

Inside Tr. 2

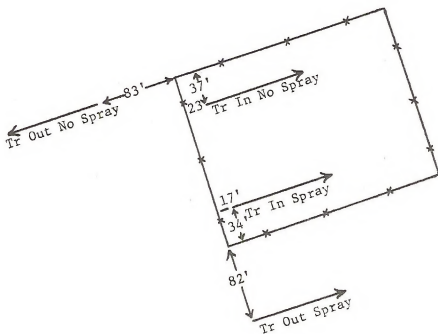
19 July 1979

19 July 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Juos	7.50			15	Juos Arno	30.50 .35		98.87 1.13	50
Shrub Total	7.50				Shrub Total	30.85		100.00	
Agsp	.23	6.37	85.19	15	Agsp	.23	11.86	82.14	10
Pose	.01	.28	3.70	5	Pose	.05	2.58	17.86	5
Orhy	.03	.83	11.11	5					
Grass Total	.27	7.48	100.00		Grass Total	.28	14.43	100.00	
Haac	2.78	77.01	83.23	55	Haac	1.41	72.68	84.94	40
Eren	.03	.83	.90	10	Arfe	.11	5.67	6.63	25
Arfe	.16	4.43	4.79	20	Phho	.13	6.70	7.83	5
Pefr	.01	.28	.30	5	Crfc	.01	.52	.60	10
Asdi	.01	.28	.30	5					
Oppo	.35	9.70	10.48	5					
Forb Total	3.34	92.52	100.00		Forb Total	1.66	85.57	100.00	
Forb & Grass Total	3.61	100.00			Forb & Grass Total	1.94			
Bare Ground	82.76			100	Bare Ground	55.19			95
Litter	10.57			100	Litter	37.08			100
Rock	3.10			95	Rock	5.80			65

Grazing Systems Study
Baggs, Wyoming
Powder Rim Allotment
Pasture C

Code Number: 0606
County: Carbon
Legal Description: R93W T13N SW $\frac{1}{4}$ Sec 28
Elevation: 6300
Slope & Exposure: Flat
Vegetation Type: Big sagebrush - western wheatgrass
Treatment: No spray - $\frac{1}{2}$; Sprayed - $\frac{1}{2}$
Fence Constructed: Aug., 1967 Livestock exclusion
Transects Established: Aug., 1967
Fenceline Photo Stations: From SW corner looking North - fence centered.
From SE corner looking North - fence centered.
(Views taken standing on corner cross braces)
General Location: NW part of Pasture C. Enclosure is 1/8 mile E
of main road from Baggs approximately 2 miles N
of Red Draw bridge.



Appendix B

POWDER RIM ALLOTMENT - PASTURE C

Exclosure

Artr-Agsm Type - Sprayed
0 slope

Outside

16 July 1975

Inside

16 July 1975

	Cover %	Comp. % all G & F	Comp. % by Group	% Freq.		Cover %	Comp. % all G & F	Comp. % by Group	% Freq.
	Avg.					Avg.			
Artr	5.45		40.43	40	Artr	3.98		69.95	30
Atco	8.03		59.57	15	Atco	0.05		0.87	5
Shrub Total	13.48		100.00		Chvi	1.66		29.18	15
Agsm	0.05	1.84	2.49	5	Shrub Total	5.69		100.00	
Orhy	0.01	0.37	0.50	5	Agsm	0.06	1.79	2.10	10
Pose	0.30	11.03	14.93	55	Feoc	0.02	0.60	0.69	15
Sihy	0.33	12.14	16.42	40	Pose	0.01	0.30	0.34	5
Stco	1.32	48.53	65.68	55	Sihy	0.16	4.75	5.60	20
Grass Total	2.01	73.91	100.00		Stco	2.61	77.45	91.26	85
Alde	0.12	4.42	16.91	100	Grass Total	2.86	84.89	100.00	
Depi	0.02	0.73	2.81	20	Alde	0.09	2.67	17.64	90
Eren	0.01	0.36	1.40	10	Arabis spp.	0.01	0.29	1.97	5
Erov	0.05	1.84	7.05	5	Depi	0.01	0.29	1.97	10
Lare	0.01	0.36	1.40	5	Oeco	0.01	0.29	1.97	5
Oeco	0.01	0.36	1.40	5	Oppo	0.03	0.89	5.89	5
Oppo	0.30	11.03	42.26	5	Phho	0.36	10.68	70.59	40
Phho	0.19	6.99	26.77	35	Forb Total	0.51	15.11	100.00	
Forb Total	0.71	26.09	100.00		Grass and Forb Total	3.37	100.00		
Grass and Forb Total	2.72	100.00							

Appendix B

POWDER RIM ALLOTMENT - PASTURE C

Exclosure

Artr-Agsm Type - Sprayed
0 slope

Outside

26 July 1979

Inside

26 July 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	4.25		36.96	30	Artr	4.73		83.27	35
Atco	7.25		63.04	10	Chvi	.85		14.96	5
					Arsp	.10		1.77	5
Shrub Total	11.50		100.00		Shrub Total	5.68		100.00	
Sihy	.30	10.00	14.49	30	Stco	3.32	78.67	89.97	70
Pose	.32	10.67	15.46	45	Agsm	.28	6.64	7.59	10
Stco	1.35	45.00	65.22	60	Sihy	.05	1.18	1.36	5
Agsm	.01	.33	.48	5	Pose	.04	.95	1.08	10
Orhy	.08	2.67	3.86	10					
Brte	.01	.33	.48	5					
Grass Total	2.07	69.00	100.00		Grass Total	3.69	87.44	100.00	
Spco	.07	2.33	7.53	5	Alde	.12	2.84	22.64	80
Alde	.11	3.67	11.83	95	Phho	.30	7.11	56.60	20
Phho	.45	15.00	48.39	25	Oeco	.02	.47	3.77	15
Eren	.10	.33	1.08	5	Oppo	.03	.71	5.66	5
Erov	.18	6.00	19.35	10	Ermi	.01	.24	1.89	5
Oppo	.08	2.67	8.60	5	Lare	.05	1.18	9.43	10
Lare	.03	1.00	3.23	20					
Forb Total	.93	31.00	100.00		Forb Total	.53	13.56	100.00	
Grass and Forb Total	3.00	100.00			Grass and Forb Total	4.22	100.00		
Bare Ground	82.30			100	Bare Ground	84.64			100
Litter	14.06			100	Litter	10.95			100
Rock	0.00			0	Rock	0.00			0

Appendix B

POWDER RIM ALLOTMENT - PASTURE C

Exclosure

Artr-Agsm Type - No Spray
0 slope

Outside

Inside

16 July 1975

16 July 1975

	Cover %	Comp. % all G & F	Comp. % by Group	% Freq.		Cover %	Comp. % all G & F	Comp. % by Group	% Freq.
	Avg.					Avg.			
Artr	6.31		78.49	55	Arsp	0.65		4.44	10
Atco	0.20		2.49	5	Artr	9.61		65.55	65
Chvi	1.53		19.02	10	Atco	3.90		26.60	15
					Chvi	0.50		3.41	10
Shrub Total	8.04		100.00		Shrub Total	14.66		100.00	
Agsm	0.10	3.38	10.64	15	Agsm	0.16	4.33	8.65	15
Feoc	0.01	0.33	1.06	10	Orhy	0.13	3.52	7.03	10
Orhy	0.14	4.75	14.89	15	Pose	0.35	9.46	18.92	40
Pose	0.20	6.78	21.28	30	Sihy	0.51	13.78	27.57	50
Sihy	0.33	11.18	35.10	30	Stco	0.70	18.91	37.83	20
Stco	0.16	5.42	17.02	15					
Grass Total	0.94	31.84	100.00		Grass Total	1.85	50.00	100.00	
Alde	0.10	3.39	4.98	100	Alde	0.07	1.90	3.79	70
Andi	0.01	0.34	0.49	5	Aspu	0.15	4.05	8.10	5
Arabis spp.	0.01	0.34	0.49	10	Cyac	0.01	0.27	0.54	5
Eren	0.03	1.02	1.49	30	Eren	0.02	0.54	1.08	15
Erov	0.03	1.02	1.49	10	Oppo	0.20	5.40	10.81	5
Phho	1.76	59.67	87.57	80	Phho	1.39	37.57	75.14	80
Saka	0.04	1.36	2.00	35	Spco	0.01	0.27	0.54	5
Sili	0.01	0.34	0.49	10					
Spco	0.02	0.68	1.00	15	Forb Total	1.85	50.00	100.00	
Forb Total	2.01	68.16	100.00		Grass and Forb Total	3.70	100.00		
Grass and Forb Total	2.95	100.00							

Appendix B

POWDER RIM ALLOTMENT - PASTURE C

Exclosure

Artr-Agsm Type - No Spray

Outside

Inside

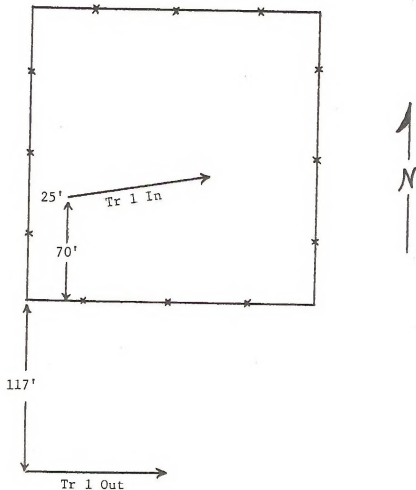
26 July 1979

26 July 1979

	Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.		Cover % Avg.	Comp. % all G & F	Comp. % by Group	% Freq.
Artr	7.38		88.07	50	Artr	10.28		68.40	45
Chvi	1.00		11.93	5	Atco	4.20		27.94	15
					Arsp	.55		3.66	5
Shrub Total	8.38		100.00		Shrub Total	15.03		100.00	
Pose	.26	5.92	22.81	30	Agsm	.23	3.73	6.61	10
Sihy	.17	3.87	14.91	20	Sihy	.58	9.42	16.67	40
Agsm	.24	5.47	21.05	15	Orhy	.20	3.25	5.75	5
Stco	.13	2.96	11.40	10	Pose	1.07	17.37	30.75	35
Orhy	.34	7.74	29.82	20	Stco	1.40	22.73	40.23	15
Grass Total	1.14	25.97	100.00		Grass Total	3.48	56.49	100.00	
Phho	2.78	63.33	85.54	85	Alde	.10	1.62	3.73	50
Alde	.10	2.28	3.08	85	Phho	2.21	35.88	82.46	60
Spc0	.14	3.19	4.31	30	Eren	.13	2.11	4.85	5
Erov	.04	.91	1.23	5	Oppo	.20	3.25	7.46	5
Eren	.19	4.33	5.85	30	Spc0	.04	.65	1.49	10
Forb Total	3.25	74.03	100.00		Forb Total	2.68	43.51	100.00	
Grass and Forb Total	4.39	100.00			Grass and Forb Total	6.16	100.00		
Bare Ground	88.92			100	Bare Ground	64.30			100
Litter	6.28			100	Litter	28.82			100
Rock	0.00			0	Rock	0.00			0

Grazing Systems Study
Baggs, Wyoming
Powder Rim Allotment
Pasture D

Code Number: 0407
County: Sweetwater
Legal Description: R94W T13N SE $\frac{1}{4}$ Sec 26
Elevation: 6300
Slope & Exposure: 2° N
Vegetation Type: Shadscale
Treatment: None
Fence Constructed: Aug., 1967 Livestock Exclusion
Transects established: Sept., 1967
Fenceline Photo Stations: From SW corner looking North - fence centered.
From SW corner looking East - fence centered.
(Views taken standing on corner cross braces)
General Location: NE part of Pasture D. Enter Pasture D at NE corner W of Sand Creek bridge and follow trail S along D-C fence and then W toward base of high bluffs. Exclosure adjacent to trail approximately 2 miles from gate.



Appendix B

POWDER RIM ALLOTMENT - PASTURE D

Exclosure

Atco Type

N exp., 2° slope

Inside:

Outside

24 June 1975

24 June 1975

	Cover %	Comp. % all	Comp. % by	% %		Cover %	Comp. % all	Comp. % by	% %
	Avg.	G & F	Group	Freq.		Avg.	G & F	Group	Freq.
Arsp	0.40		8.02	5	Artr	3.73		73.58	50
Artr	3.88		77.75	35	Atco	1.16		22.88	20
Atco	0.33		6.62	15	Chvi	0.08		1.57	10
Atga	0.10		2.00	5	Eula	0.10		1.97	5
Koam	0.28		5.61	15					
Shrub Total	4.99		100.00		Shrub Total	5.07		100.00	
Agsm	0.01	0.30	0.31	5	Brte	0.03	0.93	1.04	25
Brte	0.01	0.30	0.31	5	Feoc	0.08	2.47	2.80	75
Orhy	0.41	12.24	12.65	20	Orhy	0.08	2.47	2.80	20
Pose	0.23	6.87	7.10	40	Pose	0.58	17.91	20.28	50
Stco	2.58	77.02	79.63	95	Spcr	0.01	0.31	0.35	5
					Stco	2.08	64.20	72.73	75
Grass Total	3.24	96.73	100.00		Grass Total	2.86	88.29	100.00	
Alde	0.01	0.30	9.09	5	Alde	0.06	1.85	15.78	55
Anbr	0.01	0.30	9.09	5	Asge	0.01	0.31	2.63	10
Cora	0.01	0.30	9.09	5	Chde	0.02	0.61	5.27	15
Eren	0.02	0.59	18.18	20	Chdo	0.01	0.31	2.63	5
Gipu	0.02	0.59	18.18	15	Cyac	0.01	0.31	2.63	10
Lare	0.01	0.30	9.09	5	Depi	0.01	0.31	2.63	5
Phho	0.02	0.59	18.19	20	Erce	0.03	0.93	7.89	25
Plpa	0.01	0.30	9.09	5	Eren	0.02	0.61	5.27	15
Forb Total	0.11	3.27	100.00		Gile	0.02	0.61	5.27	15
Grass and					Gipu	0.02	0.61	5.27	20
Forb Total	3.35	100.00			Lare	0.01	0.31	2.63	5
					Lede	0.01	0.31	2.63	10
					Lelu	0.02	0.61	5.27	15
					Lepu	0.10	3.09	26.31	5
					Lupu	0.01	0.31	2.63	5
					Plpa	0.01	0.31	2.63	10
					Spco	0.01	0.31	2.63	5
					Forb Total	0.38	11.71	100.00	
					Grass and				

Appendix B

POWDER RIM ALLOTMENT - PASTURE D

Exclosure

Atco Type

N. exp., 2° slope

Inside

Outside

9 August 1979

9 August 1979

	Cover %	Comp. % all G & F	Comp. % by Group	% Freq.		Cover %	Comp. % all G & F	Comp. % by Group	% Freq.
	Avg.					Avg.			
Artr	.85		57.43	10	Artr	.23		16.08	10
Atga	.23		15.54	5	Atco	1.10		76.92	10
Chvi	.30		20.27	5	Eula	.10		7.00	5
Arsp	.10		6.76	5					
Shrub Total	1.48		100.00		Shrub Total	1.43		100.00	
Stco	2.65	79.58	85.48	60	Spcr	.17	5.01	5.54	5
Pose	.44	13.21	14.19	35	Pose	.91	26.84	29.64	50
Orhy	.01	.30	.32	5	Stco	1.86	54.87	60.59	75
					Orhy	.07	2.06	2.28	10
					Feoc	.01	.29	.33	5
					Brte	.04	1.18	1.30	5
					Agsm	.01	.29	.33	5
Grass Total	3.10	93.09	100.00		Grass Total	3.07	90.56	100.00	
Phlo	.01	.30	4.35	5	Eren	.08	2.36	25.00	40
Lare	.01	.30	4.35	5	Alde	.09	2.65	28.13	85
Eren	.10	3.00	43.48	40	Saka	.06	1.77	18.75	10
Alde	.04	1.20	17.39	35	Phho	.03	.88	9.38	15
Saka	.06	1.80	26.09	10	Lare	.05	1.47	15.63	10
Unid.	.01	.30	4.35	5	Unid.	.01	.29	3.13	5
Forb Total	.23	6.91	100.00		Forb Total	.32	9.44	100.00	
Forb & Grass Total	3.33	100.00			Forb & Grass Total	3.39	100.00		
Bare Ground	89.93			100	Bare Ground	92.06			100
Litter	6.78			100	Litter	5.45			100
Rock	0.00			0	Rock	0.00			0

APPENDIX C

Browse transect vegetation cover, frequency
and density data summaries for 1975 and 1979

Appendix C

Poison Buttes Allotment
Browse Tr. 1
SSE exp., 0.5-12° slope

19 August 1975

20 1' x 1' plot transect		
	Cover %	%
	Avg.	Freq.
Bare Ground	47.89	100
Rock	21.80	100
Litter	24.88	100
Debris	3.48	65
Ground Total	98.05	
Artr	0.15	5
Cemo	5.58	25
Juos	10.00	10
Putr	3.50	10
Shrub Total	19.23	
Brte	0.06	60
Orhy	0.02	15
Pose	0.05	5
Siht	0.11	15
Stco	0.03	5
Grass Total	0.27	
Alde	0.07	70
Arabis spp.	0.03	10
Crfc	0.22	20
Gisi	0.03	30
Haac	1.36	15
Phau	0.01	5
Phho	0.03	5
Forb Total	1.75	

200 point transect	
	Percent Canopy Coverage
Arno	0.5
Cemo	12.5
Juos	12.0
Putr	3.5
Total	28.5

10' x 200' belt transect		
	Age Class	Number per acre
Arno	M	218
	Y	22
Artr	M	109
	Y	22
Cemo	M	1285
	Y	65
Juos	M	152
	Y	22
Putr	M	566
Total		2461

Appendix C

POISON BUTTES ALLOTMENT

Browse Tr-1

SSE exp., 0.5-12° slope

14 August 1979

20 1' x 1' plot transect		
	Cover	
	%	%
	Avg.	Freq.
Bare ground	67.07	100
Rock	5.63	80
Litter	24.29	100
Debris	1.24	50
Ground Total	98.93	
Cemo	4.50	20
Juos	10.00	10
Putr	3.60	5
Shrub Total	18.10	
Brte	.02	15
Orhy	.46	15
Pose	.04	5
Sihy	.04	5
Stco	.03	5
Grass Total	.59	
Alde	.01	80
Haac	.48	10
Lare	.01	5
Pefr	3.50	30
Phho	.03	5
Forb Total	4.03	

200 pt. transect		Percent
		Canopy
		Coverage
Arno		.50
Cemo		11.00
Juos		10.50
Putr		2.00
Total		24.00

10' x 200' belt transect		
	Age	Number
	Class	per acre
Arno	M	153
	Y	22
Artr	M	44
Cemo	M	1350
	Y	22
	S	22
Juos	M	153
	Y	22
Oppo	M	1
Putr	M	566
	Y	65
Total		2420

Appendix C

Oppenhiemer Allotment - East Pasture
Browse Tr. 1
S exp., 4-10° slope

21 August 1975

20 1' x 1' plot transect		
	Cover %	%
	Avg.	Freq.
Bare Ground	30.54	90
Rock	21.45	85
Debris	2.05	45
Litter	43.87	100
Ground Total	97.91	
Cemo	20.05	45
Juos	19.40	25
Shrub Total	39.45	
Orhy	0.15	10
Pose	0.13	15
Stco	0.08	5
Grass Total	0.36	
Alde	0.03	30
Arabis spp.	0.02	20
Arfe	0.13	10
Chfr	0.01	10
Crfc	0.10	30
Erea	0.03	10
Gisi	0.01	10
Haac	0.74	40
Haar	0.25	5
Oeco	0.01	10
Oppo	0.20	5
Phau	0.03	5
Forb Total	1.56	

200 point transect	
	Percent Canopy Coverage
Cemo	19.0
Juos	15.5
Putr	0.5
Total	35.0

10' x 200' belt transect		
	Age Class	Number per acre
Cemo	M	1002
	Y	196
	S	44
Juos	M	174
	S	22
Putr	M	44
	S	22
Syor	Y	44
Total		1548

Appendix C

Oppenhiemer Allotment - East Pasture
Browse Tr. 1
S exp., 4-10° slope

17 August 1979

20 1' x 1' plot transect		
	Cover	%
	%	Freq.
	Avg.	
Bare Ground	48.56	85
Rock	4.03	75
Litter	38.32	100
Debris	2.49	80
Ground Total	93.40	
Cemo	16.15	45
Juos	12.10	20
Shrub Total	28.25	
Orhy	.23	10
Stco	5.05	10
Pose	.01	5
Grass Total	5.29	
Alde	.03	30
Haac	.80	20
Arabis spp.	.02	15
Oppo	.20	5
Erea	.01	5
Crfc	.07	15
Gisi	.01	5
Arfe	.03	5
Haar	.47	10
Lare	.01	5
Phau	.01	5
Forb Total	1.66	
Forb & Grass		
Total	6.95	

200 point transect	
	Percent
	Canopy
	Coverage
Cemo	.15
Juos	.12
Putr	.01
Total	.28

10' x 200' belt transect		
	Age	Number
	Class	per acre
Cemo	M	1024
	Y	196
	S	22
Oppo		457
Putr	M	22
Juos	M	174

Appendix C

Oppenhiemer Allotment - West Pasture

Browse Tr. 1

NNE exp., 18° slope

21 August 1975

20 1' x 1' plot transect		
	Cover	
	%	%
	Avg.	Freq.
Bare Ground	54.81	100
Rock	9.90	90
Debris	6.25	90
Litter	26.11	100
Ground Total	97.07	
Arno	0.25	10
Artr	4.28	30
Cemo	8.18	25
Juos	3.00	10
Putr	0.48	10
Shrub Total	16.19	
Agsp	1.01	60
Brte	0.01	10
Orhy	0.28	5
Pofe	0.30	10
Pose	0.37	40
Sihy	0.01	5
Grass Total	1.98	
Alde	0.03	25
Andl	0.01	5
Arabis spp.	0.01	10
Arfe	0.06	20
Asdi	0.01	5
Crepis spp.	0.01	5
Crfc	0.22	25
Erea	0.01	5
Gisi	0.01	10
Lare	0.01	5
Phau	0.03	10
Phho	0.58	35
Phlo	0.01	5
Stco	0.03	5
Trgy	0.05	25
Forb Total	1.08	

200 point transect	
	Percent Canopy Coverage
Arno	4.0
Artr	4.5
Cemo	8.5
Juos	5.0
Putr	0.5
Total	22.5

10' x 200' belt transect		
	Age Class	Number per acre
Arno	M	1612
	Y	196
Artr	M	1851
	Y	261
Cemo	M	1198
	Y	218
	S	65
Juos	M	87
	S	44
Putr	M	44
Total		5576

Appendix C

Oppenhiemer Allotment - West Pasture

Browse Tr. 1
NNE exp., 18⁰ slope

17 August 1979

20 1' x 1' plot transect			200 point transect	
	Cover			Percent
	%	%		Canopy
	Avg.	Freq.		Coverage
Arno	.58	10	Artr	4.00
Cemo	6.63	15	Arno	1.50
Artr	3.85	25	Juos	2.50
Juos	1.80	10	Cemo	5.50
Shrub Total	12.86		Total	13.50
Pofe	.15	5		
Agsp	.76	55		
Pose	.48	35		
Orhy	.38	10		
Grass Total	1.77			
Alde	.03	30		
Phho	.21	15		
Gisi	.01	5		
Crfe	.02	5		
Erea	.01	10		
Arfe	.02	10		
Arabis spp.	.03	10		
Lare	.02	15		
Haac	.01	5		
Forb Total	.36			
Forb & Grass				
Total	2.13			
Bare Ground	68.88	100		
Litter	22.38	100		
Debris	3.32	95		
Rock	2.08	45		

10' x 200' belt transect		
	Age	Number
	Class	per acre
Arno	M	1350
	Y	305
	S	131
Artr	M	1481
	Y	457
	S	109
Oppo		261
Putr	M	22
Cemo	M	1307
	Y	131
Juos	M	65
	Y	22
	S	22

Appendix C

Powder Rim Allotment - Pasture A
Browse Tr. 1
NNW exp., 5.5° slope

3 September 1975

20 1' x 1' plot transect

	Cover %	% Freq.
	Avg.	
Bare Ground	48.47	90
Rock	7.95	75
Debris	5.45	95
Litter	36.95	100
Ground Total	98.82	
Artr	3.75	20
Cemo	5.60	15
Juos	18.00	20
Putr	0.60	15
Shrub Total	29.95	
Agsp	0.41	50
Orhy	0.13	20
Pofe	0.18	10
Pose	0.20	30
Grass Total	0.92	
Aggl	0.03	5
Arabis spp.	0.01	5
Arfe	0.10	5
Asdi	0.01	5
Assp	0.15	10
Chat	0.01	10
Crepis spp.	0.01	5
Erov	0.01	5
Gisi	0.01	5
Lare	0.01	5
Forb Total	0.35	

200 point transect

	Percent Canopy Coverage
Arno	0.5
Artr	6.0
Cemo	8.0
Juos	23.0
Putr	3.0
Total	40.5

10' x 200' belt transect

	Age Class	Number per acre
Arno	M	152
Artr	M	849
	Y	218
Cemo	M	719
	Y	218
Chna	M	22
Eula	M	261
	Y	44
Juos	M	109
	S	22
Putr	M	675
	Y	87
	S	22
Total		3398

Appendix C

Powder Rim Allotment - Pasture A
Browse Tr. 1
NNW exp., 5.5° slope

15 August 1979

20 1' x 1' plot transect

	Cover % Avg.	% Freq.
Artr	6.25	20
Cemo	3.15	15
Juos	18.00	20
Putr	.10	10
Shrub Total	27.50	
Agsp	.64	55
Pose	.20	5
Pofe	.23	20
Orhy	.29	20
Grass Total	1.36	
Arfe	.03	5
Asdi	.02	5
Erum	.08	10
Crfe	.16	15
Erov	.03	15
Crepis spp.	.04	5
Assp	.35	5
Unid.	.05	5
Unid.	.05	5
Forb Total	.81	
Grass and Forb Total	2.17	
Bare Ground	53.52	100
Rock	1.05	45
Litter	35.25	95
Debris	3.46	95

200 point transect

	Percent Canopy Coverage
Juos	23.00
Artr	6.50
Putr	1.50
Cemo	6.50
Eula	.50
Total	38.00

10' x 200' belt transect

	Age Class	Number per acre
Cemo	M	806
	Y	87
	S	22
Juos	M	109
	S	22
Putr	M	436
	Y	22
Artr	M	741
	Y	109
Eula	M	174
	Y	22
Chna	M	22
Arno	M	131

Appendix C

Powder Rim Allotment - Pasture B
Browse Tr. 1
SE exp., 7° slope

4 September 1975

20 1' x 1' plot transect		
	Cover	
	%	%
	Avg.	Freq.
Bare Ground	72.41	100
Rock	11.30	100
Debris	3.45	65
Litter	12.75	100
Ground Total	99.90	
Cemo	10.95	30
Juos	7.25	15
Shrub Total	18.20	
Orhy	0.03	10
Pose	0.03	5
Grass Total	0.06	
Alde	0.01	5
Arabis spp.	0.01	5
Gisi	0.01	5
Lare	0.01	5
Phho	0.03	5
Forb Total	0.07	

200 point transect	
	Percent Canopy Coverage
Cemo	14.5
Juos	4.0
Total	18.5

10' x 200' belt transect		
	Age Class	Number per acre
Artr	M	196
	Y	22
Cemo	M	1416
	Y	305
	S	22
Chvi	M	22
Juos	M	65
	Y	22
Total		2070

Appendix C

Powder Rim Allotment - Pasture B
Browse Tr. 1
SE exp., 7^o slope

17 August 1979

20 1' x 1' plot transect		
	Cover %	%
	Avg.	Freq.
Juos	7.00	15
Cemo	9.50	25
Shrub Total	16.50	
Orhy	.05	5
Grass Total	.05	
Gisi	.01	5
Forb Total	.01	
Forb & Grass Total	.06	
Bare Ground	84.03	100
Litter	8.39	100
Debris	2.24	85
Rock	5.29	30

200 point transect	
	Percent Canopy Coverage
Cemo	11.00
Artr	.50
Juos	3.50
	5
Shrub Total	1.00

10' x 200' belt transect		
	Age Class	Number per acre
Juos	M	65
	Y	22
Artr	M	218
	Y	22
Cemo	M	1459
	Y	305
Chvi	M	22
Oppo		152

Appendix C

Powder Rim Allotment - Pasture C
 Browse Tr. 1
 SSW exp., 9° slope

22 August 1975

20 1' x 1' plot transect		
	Cover %	%
	Avg.	Freq.
Bare Ground	77.70	100
Rock	15.53	100
Debris	1.43	45
Litter	5.23	90
Ground Total	99.89	
Artr	0.03	5
Atco	0.15	10
Cemo	0.45	30
Chvi	0.25	5
Shrub Total	0.88	
Brte	0.02	15
Orhy	0.07	20
Pose	0.01	5
Grass Total	0.10	
Copa	0.01	5
Forb Total	0.01	

200 point transect	
	Percent Canopy Coverage
Atco	0.5
Cemo	13.0
Total	13.5

10' x 200' belt transect		
	Age Class	Number per acre
Artr	M	44
	Y	22
Atco	M	218
	Y	131
	S	22
Cemo	M	937
	Y	65
	S	44
Chvi	M	457
	Y	44
Juos	Y	22
Total		2006

Appendix C

Powder Rim Allotment - Pasture C

Browse Tr. 1
SSW exp., 9⁰ slope

15 August 1979

20 1' x 1' plot transect

	Cover %	% Freq.
	Avg.	
Bare Ground	91.73	100
Rock	5.23	35
Debris	1.22	75
Litter	1.73	90
Chvi	.10	5
Cemo	.45	5
Shrub Total	.55	
Orhy	.10	5
Grass Total	.10	
Forb Total	0	

200 point transect

	Percent Canopy Coverage
Cemo	9.00
Atco	.50
Total	9.50

10' x 200' belt transect

	Age Class	Number per acre
Atco	M	131
	Y	22
Chvi	M	348
Cemo	M	1045
	Y	22
Artr	M	65

Appendix C

Powder Rim Allotment - Pasture D
Browse Tr. 1
ENE exp., 7.5° slope

4 September 1975

20 1' x 1' plot transect

	Cover %	% Freq.
	Avg.	
Bare Ground	70.98	100
Rock	3.25	95
Debris	5.75	80
Litter	18.02	100
Ground Total	98.00	
Artr	1.15	25
Cemo	4.25	5
Chvi	0.10	5
Juos	18.25	20
Putr	1.35	15
Shrub Total	25.10	
Agsm	0.56	40
Brte	0.02	15
Cafi	0.01	5
Kocr	0.03	5
Orhy	0.35	20
Pofe	0.01	5
Pose	0.16	15
Grass Total	1.11	
Alde	0.02	15
Andi	0.10	5
Arabis spp.	0.01	5
Asdi	0.03	5
Chat	0.01	10
Crfc	0.08	10
Eren	0.10	5
Erov	0.20	10
Gisi	0.01	5
Lare	0.02	15
Lepu	0.31	15
Lofo	0.01	5
Phho	0.03	5
Trgy	0.01	5
Forb Total	0.94	

200 point transect

	Percent Canopy Coverage
Artr	4.0
Cemo	3.0
Chna	0.5
Chvi	0.5
Juos	16.0
Putr	6.5
Total	30.5

10' x 200' belt transect

	Age Class	Number per acre
Arno	M	22
Artr	M	1394
	Y	218
Cemo	M	283
	Y	22
Chna	M	44
Chvi	M	174
Juos	M	152
	Y	131
	S	22
Putr	M	915
	Y	131
Total		3508

Appendix C

Powder Rim Allotment - Pasture D

Browse Tr. 1

ENE exp., 7.5° slope

16 Aug. 1979

20 1' x 1' plot transect		
	Cover	%
	Avg.	Freq.
Putr	.30	5
Chvi	.11	10
Artr	.83	25
Juos	13.25	15
Cemo	9.60	10
Shrub Total	24.09	
Kocr	.04	5
Pose	.15	10
Orhy	.27	20
Agsm	.33	30
Grass Total	.79	
Phau	.05	5
Erov	.02	10
Alde	.02	15
Lare	.03	20
Eren	.04	5
Arabis spp.	.03	5
Lepu	.29	10
Gisi	.01	5
Forb Total	.49	
Bare Ground	80.82	100
Litter	14.89	100
Debris	3.02	95
Rock	.03	5
Ground Total	98.76	

200 point transect	
	Percent
	Canopy
	Coverage
Chna	.50
Artr	3.00
Juos	11.00
Putr	1.00
Cemo	2.50
Total	18.00

10' x 200' belt transect		
	Age	Number
	Class	per acre
Artr	M	1220
	Y	348
Chna	M	22
Putr	M	784
	Y	44
Chvi	M	218
Oppo		109
Juos	M	152
	Y	174
Arno	M	22

APPENDIX D

Checklist of plants collected on the grazing systems study area
west of Baggs in Carbon and Sweetwater Counties, Wyoming

Appendix D

Checklist of Plants
Collected on the Grazing Systems Study Area
West of Baggs in Carbon and Sweetwater Counties, Wyoming

Mounts of all the plant species plus new specimens are retained at the Range Management Department Herbarium, University of Wyoming at Laramie. Common names were taken from Beetle (1970). Plant names marked with a single asterisk (*) denote those which are the first recorded collection in Wyoming, and those marked with a double asterisk (**) represent new plants collected and identified for 1975.

Amaranthaceae

Amaranth Family

Amaranthus gracilians L.
Amaranthus retroflexus L.

Prostrate pigweed
Redroot pigweed

Anacardiaceae

Sumac Family

Rhus trilobata Nutt. ex. T. & G.

Skunkbush sumac

Apiaceae (Umbelliferae)

Parsley Family

Cymopterus acaulis (Pursh) Raf.
Cymopterus bulbosus A. Nels.
Lomatium foeniculaceum (Nutt.) C. & R.
Lomatium simplex (Nutt.) McBride
Pteryxia terebinthina (Hook) C. & R.
var. *calcareum* (Jones) Mathias

Stemless springparsley
Onion springparsley
Hairseed lomatium
Narrowleaf lomatium
Ferny springparsley

Asclepiadaceae

Milkweed Family

Asclepias cryptoceras S. Wats.
Asclepias speciosa Torr.

Pallid milkweed
Showy milkweed

Asteraceae (Compositae)

Sunflower Family

Artemisia frigida Willd.
Artemisia ludoviciana Nutt.
Artemisia nova A. Nels.
Artemisia peditifida Nutt.
Artemisia spinescens D. C. Eaton
Artemisia tridentata Nutt.
Achillea millefolium L.
ssp. *lanulosa* (Nutt.) Piper
Agoseris glauca (Pursh) Raf.
var. *laciniata* (D.C. Eat.) Smiley

Fringed sagewort
Louisiana sagewort
Black sagebrush
Birdfoot sagewort
Bud sagewort
Basin big sagebrush
Common yarrow
Pale agoseris

Asteraceae (Compositae) Cont'd Sunflower Family

Antennaria dimorpha (Nutt.) T. & G.	Low pussytoes
Antennaria rosea Greene	Rose pussytoes
Aster adsensens Lindl.	Longleaf aster
Aster arenosus (Heller) Blake	Smallflower aster
Aster pauciflorus Nutt.	Fewflowered aster
Balsamorhiza sagittata (Pursh) Nutt.	Arrowleaf balsamroot
Chaenactis douglasii (Hook.) H. & A.	Douglas dustymaiden
Chrysothamnus nauseosus (Pall.) Britt.	
var. albicaulis (Nutt.) Rydb.	Rubber rabbitbrush
Chrysothamnus nauseosus (Pall.) Britt.	
var. artus (A. Nels.) Cronq.	Rubber rabbitbrush
Chrysothamnus nauseosus (Pall.) Britt.	
var. glabratus. (Gray) Cronq.	Rubber rabbitbrush
Chrysothamnus parryi (A. Gray) Greene	
ssp. howardii (Parry) H. & C.	Parry rabbitbrush
Chrysothamnus vicidiflorus (Hook.) Nutt.	
ssp. lanceolatus (Nutt.) H. & C.	Douglas rabbitbrush
Chrysothamnus vicidiflorus (Hook.) Nutt.	
ssp. linifolius (Greene) H. & C.	Flaxleaf rabbitbrush
Chrysothamnus vicidiflorus (Hook.) Nutt.	
ssp. pumilus (Nutt.) H. & C.	Low douglas rabbitbrush
Chrysothamnus vicidiflorus (Hook.) Nutt.	
ssp. vicidiflorus	Douglas rabbitbrush
Cirsium arvense (L.) Scop.	Canada thistle
Cirsium centaureae (Rydb.) K. Schum	Fringed thistle
Crepis acuminata Nutt.	Tapertip hawksbeard
Crepis modocensis Greene	Yellowstone hawksbeard
Crepis occidentalis Nutt.	Western hawksbeard
Erigeron eatoni A. Gray	
ssp. typicus Cronq.	Eaton fleabane
Erigeron engelmanni A. Nels.	
ssp. typicus Cronq.	Engelmann fleabane
Erigeron nematophyllus Rydb.	Mat fleabane
Erigeron pulcherrimus	
var. wyomingia (Rydb.) Cronq.	Wyoming Basin fleabane
Erigeron pumilus Nutt.	
ssp. concinnoides Cronq.	Low fleabane
Franseria acanthicarpa (Hook.) Coville	Annual bursage
Grindellia squarrosa (Push) Dunal	Curlycup gumweed
Xanthocephalum sarothrae (Pursh) Britt. & Rusby	Broom snakeweed
Haplopappus acaulis (Nutt.) A. Gray	Stemless goldenweed
Haplopappus armerioides (Nutt.) A. Gray	Thrifty goldenweed
Haplopappus lanceolatus (Hook.) T. & G.	Lanceleaf goldenweed
Helianthus annuus L.	Common sunflower
Hymenopappus filifolius Hook.	
var. luteus (Nutt.) Turner	Fineleaf hymenopappus
Hymenoxys richardsonii (Hook.) Ckll.	Pingue actinea
Iva axillaris Pursh	Poverty sumweed
Iva xanthifolia Nutt.	Marshelder sumweed
Lygodesmia grandiflora (Nutt.) T. & G.	Largeflowered skeletonplant
Machaeranthera canescens (Pursh) A. Gray	Hoary tansyaster
Machaeranthera glabriuscula (Nutt.) Cronq.	
& Keck var. villosa (Nutt.) Cronq. & Keck	Alkali aster
Machaeranthera grindelioides (Nutt.)	
Shinners	Nuttall goldenweed

Asteraceae (Compositae) Cont'd

Malacothrix sonchoides (Nutt.) T. & G.
Senecio integerrimus Nutt.
 var. *exaltatus* (Nutt.) Cronq.
Stephanomeria runcinata Nutt.
Tanacetum nuttallii T. & G.
Taraxacum officinale Wiggars
Tetradymia canescens D.C.
Tetradymia nuttallii T. & G.
Townsendia incana Nutt.
Townsendia strigosa Nutt.
Tragopogon pratensis L.
Wyethia scabra Hook.
Xanthium strumarium L.

Desert dandelion

Lambstongue groundsel
 Desert wirelettuce
 Nuttall tansy
 Common dandelion
 Gray horsebrush
 Nuttall horsebrush
 Hoary townsendia
 Hairy townsendia
 Meadow salsify
 Roughleaf wyethia
 Common cocklebur

Boraginaceae

Borage Family

Cryptantha bradburiana Payson
Cryptantha caespitosa (A. Nels.) Payson
Cryptantha flava (A. Nels.) Payson
Cryptantha flavoculata (A. Nels.) Payson
Cryptantha kelseyana Greene
 **Cryptantha watsonii* (A. Gray) Greene
Lappula redowskii (Hornem.) Greene
 var. *occidentalis* (S. Wats.) Rydb.
Lithospermum incisum Lehm.
Lithospermum ruderales Dougl. ex Lehm.
Mertensia oblongifolia (Nutt.) G. Don
 var. *nevadensis* (A. Nels.) L. Williams

Minerscandle cryptantha
 Tufted cryptantha
 Yellow cryptantha
 Roughseed cryptantha
 Kelsey cryptantha
 Watson cryptantha

Bluebur stickseed
 Narrowleaf gromwell
 Wayside gromwell

Oblongleaf bluebells

Brassicaceae (Crucifereae)

Mustard Family

Alyssum desertorum Stapf
Arabis cobrensis Jones
 **Arabis crandellii* Robinson
Arabis holboellii Hornem.
 var. *retrofracta* (Graham) Rydb.
Arabis lignifera A. Nels.
 **Arabis pulchra* Jones
 var. *pallens* Jones
Camelina microcarpa Andr.
Cardaria pubescens (Meyer) Rollins
 var. *elongata* Rollins
Caulanthus crassicaulis (Torr.) Watson
Chorisporea tenella (Pall.) D.C.
Descurainia pinnata (Walt.) Britt.
 ssp. *intermedia* (Rydb.) Detling
Descurainia pinnata (Walt.) Britt.
 ssp. *halictorum* (Ckll.) Detling
Descurainia sophia (L.) Webb.
Erysimum asperum (Nutt.) D.C.
Lesquerella alpina (Nutt. ex T. & G.) S. Wats.
 ssp. *condensata* (Nels.) Rollins & Shaw
Lesquerella ludoviciana (Nutt.) S. Wats.
Lepidium montanum Nutt.
Lepidium perforliatum L.
Physaria australis (Payson) Rollins

Desert alyssum
 Cobren rockcress
 Crandell rockcress

Holboell rockcress
 Woody rockcress

Palebeauty rockcress
 Littleseed falseflax

Hairy whitetop
 Thickstem wildcabbage
 Common bluemustard

Pinnate tansymustard

Pinnate tansymustard
 Flaxweed tansymustard
 Plains wallflower

Tufted bladderpod
 Foothill bladderpod
 Mountain pepperweed
 Clasping pepperweed
 Common twinpod

Brassicaceae (Crucifereae) Cont'd

<i>Sisymbrium elegans</i> (Jones) Payson	Showy hedgemustard
<i>Sisymbrium linifolium</i> (Nutt.) Nutt. ex T. & G.	Narrowleaf hedgemustard
<i>Stanleya pinnata</i> (Pursh) Britt. var. <i>integrifolia</i> (Jones) Rollins	Desert princesplume
<i>Streptanthella longirostris</i> (S. Wats.) Rydb.	Beakpod nippletwist
<i>Streptanthus cordatus</i> Nutt. ex T. & G.	Heartleaf twistflower
<i>Thelypodium integrifolium</i> (Nutt.) Endl.	Entireleaved thelypod
<i>Thlaspi arvense</i> L.	Field pennycress

Cactaceae

Cactus Family

Opuntia polyacantha Haw.

Plains pricklypear

Capparidaceae

Caper Family

Cleome lutea Hook

Yellow beeplant

Cleome serrulata Pursh

Rockymountain beeplant

Caprifoliaceae

Honeysuckle Family

Symphoricarpos oreophilus A. Gray

Mountain snowberry

Caryophyllaceae

Pink Family

**Arenaria fendleri*

var. *eastwoodiae* Rydb.

Fendler sandwort

Arenaria hookeri

Hooker sandwort

var. *desertorum* Maguire

Arenaria nuttallii Pax

Nuttall sandwort

Chenopodiaceae

Goosefoot Family

Atriplex argentea Nutt.

Tumbling saltbush

Atriplex canescens (Pursh.) Nutt.

Fourwing saltbush

Atriplex confertifolia (Torr. & Frem)

S. Wats.

Shadscale saltbush

Atriplex dioeca (Nutt.) Macbr.

Scurfless saltbush

Atriplex gardneri (Moq.) D. Dietr.

Nuttall saltbush

Atriplex patula L.

ssp. *hastata* (L.) Hall & Clem

Fathen saltbush

Atriplex wolfii S. Wats.

Wolf saltbush

Bassia hyssopifolia (Pall.) Kuntze

Fivehock smotherweed

Chenopodium atrovirens Rydb.

Dark goosefoot

Chenopodium Berlandieri Moq.

var. *zschackei* (Murr.) Murr.

Pitseed goosefoot

Chenopodium denticulatum A. Nels.

Desert goosefoot

Chenopodium fremontii

forma *farinosum* Aellen

Fremont goosefoot

Eurotia lanata (Pursh.) Moq.

Common winterfat

Grayia spinosa (hook.) Moq.

Spiny hopsage

Halogeton glomeratus (M. Bieb) C. A. Meyer

Common halogeton

Kochia americana S. Wats.

Greenmolly summercypress

Monolepis nuttalliana (R. & S.) Greene

Nuttall monolepis

Appendix D

Chenopodiaceae Cont'd

Monolepis pusilla Torr. ex S. Wats.	Low monolepis
Salicornia europaea L.	
ssp. rubra (A. Nels.) Breitung	Marshfire glasswort
Salsola kali L.	Common russianthistle
Sarcobatus vermiculatus (Hook.) Torr.	Black greasewood
Suaeda depressa (Pursh) S. Wats.	
var. erecta S. Wats.	Pursh seepweed
Suaeda fruticosa (L.) Forsk.	Alkali seepweed
Suaeda nigra (Raf.) Macbride	Black seepweed
Suaeda occidentalis S. Wats.	Western seepweed

Cupressaceae

Cypress Family

Juniperus osteosperma (Torr.) Little	Utah juniper
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Cyperaceae

Sedge Family

Carex eleocharis Bailey	Needleleaf sedge
Carex filifolia Nutt.	Threadleaf sedge
Scirpus nevadensis S. Wats	Nevada bulrush
Scirpus paludosus A. Nels.	Alkali bulrush

Equisetaceae

Horsetail Family

Equisetum arvense L.	Field horsetail
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Euphorbiaceae

Spurge Family

Euphorbia robusta (Engelm.) Small	Robust spurge
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Fabaceae (Leguminosae)

Pea Family

Astragalus cibarius Sheld	Silky milkvetch
Astragalus diversifolius A. Gray	Meadow milkvetch
Astragalus drummondii Dougl. ex Hook.	Drummond milkvetch
Astragalus geyeri A. Gray	Geyer milkvetch
Astragalus haydenianus A. Gray	Hayden milkvetch
Astragalus jejunus Wats.	Starveling milkvetch
Astragalus pectinatus Dougl.	
var. platyphyllus Jones	Fineleaved milkvetch
Astragalus pubentissimus T. & G.	Greenriver milkvetch
Astragalus purshii Dougl. ex Hook.	Pursh milkvetch
Astragalus spatulatus Sheld.	Spoonleaf milkvetch
Astragalus tenellus Pursh	Pulse milkvetch
Glycyrrhiza lepidota	American licorice
Hedysarum boreale Nutt.	
var. cinerascens (Rydb.) Rollins	Northern sweetvetch
Lupinus argenteus Pursh	
var. tenellus (Doug. ex G. Don) Dunn	Silvery lupine
Lupinus pusillus Pursh.	Rusty lupine
Medicago sativa L.	Alfalfa medic
Melilotus officinalis (L.) Lam.	Yellow sweetclover
Oxtropis multiceps (Nutt.) ex T. & G.	Flowers loco
Oxtropis sericea (Nutt.) ex T. & G.	Silky loco
Psoralea lanceolata Pursh	Lenon scurpea
Thermopsis rhombifolia Nutt. ex Rich.	Prairie thermopsis

Fabaceae (Leguminosae) Cont'd

<i>Trifolium gymnocarpon</i> Nutt.	Hollyleaf clover
<i>Vicia americana</i> Muhl. ex Willd.	
var. <i>minor</i> Hook.	Mat american vetch
<i>Vicia americana</i> Muhl. ex Willd.	
var. <i>truncata</i> (Nutt.) Brewer	American vetch

Hydrophyllaceae

Waterleaf Family

<i>Nama densum</i> Lemmon	
var. <i>parviflorum</i> (Greenm.) C.L. Hitchc.	Leafy nama
<i>Phacelia glandulosa</i>	
var. <i>deserta</i> (A. Nels.) Brand	Desert phacelia

Juncaceae

Rush Family

<i>Juncus balticus</i> Willd.	Baltic rush
var. <i>montanus</i> Engelm.	

Juncaginaceae

Arrowgrass Family

<i>Triglochin maritima</i> L.	Marsh arrowgrass
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Liliaceae

Lily Family

<i>Allium acuminatum</i> Hook.	Tapertip onion
<i>Allium textile</i> Nels. & Macbr.	Prairie onion
* <i>Androstephium breviflorum</i> S. Wats.	Purple funnellily
<i>Calochortus nuttallii</i> Torr.	Sego mariposalily

Linaceae

Flax Family

<i>Linum lewisii</i> Pursh	Lewis flax
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Loasaceae

Blazing-Star Family

<i>Mentzelia albicaulis</i> (Hook.) T. & G.	Whitestem mentzelia
<i>Mentzelia decapetala</i> (Pursh ex Sims) Urban & Gilg	Tenpetal mentzelia
<i>Mentzelia dispersa</i> S. Wats.	Bushy mentzelia

Malvaceae

Mallow Family

<i>Sphaeralcea coccinea</i> (Pursh) Rydb.	Scarlet globemallow
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Nyctaginaceae

Four-o'clock Family

<i>Tripterocalyx micranthus</i> (Torr.) Hook.	Annual sandpuffs
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Appendix D

Onagraceae

Evening-primrose Family

Epilobium paniculatum Nutt. ex T. & G.

forma *adenocaulon* Hausskn.

Gayophytum ramosissimum T. & G.

Oenothera andina Nutt. ex T. & G.

Oenothera caespitosa Nutt.

Oenothera contorta Dougl. ex Lehm.

var. *flexuosa* (A. Nels.) Munz

Oenothera pallida Lindl. spp. *trichocalyx*

(Nutt. ex T. & G.) Munz & Klein

Oenothera scapoidea T. & G.

Sticky willowherb

Branchy groundsmoke

Andean sundrops

Tufted eveningprimrose

Plains eveningprimrose

Pale eveningprimrose

Barestem eveningprimrose

Orobanchaceae

Broomrape Family

Orebanche fasciculata Nutt.

Purple broomrape

Plantaginaceae

Plantain Family

Plantago patagonica Jacq.

Wooly plantain

Poaceae (Gramineae)

Grass Family

Agropyron cristatum (L.) Gaertn.

Agropyron riparium Scribn. & Smith

Agropyron spicatum (Pursh) Scribn. & Smith

Agropyron smithii Rydb.

Agropyron smithii Rydb.

var. *molle* (Scribn. & Smith) M.E. Jones

Agropyron dasystachyum (Hook.) Scribn.

Aristida fendleriana Steud.

Bromus commutatus Schrad.

Bromus inermis Leyss.

Bromus tectorum L.

Calamagrostis montanensis Scribn.

Dactylis glomerata L.

Distichlis spicata (L.) Greene

var. *stricta* (Torr.) Beetle

Elymus cinereus Scribn. & Merr.

Festuca octoflora Walt.

Festuca pratensis Huds

Hordeum jubatum L.

Hordeum jubatum L.

var. *caespitosum* (Scribn.) Hitchc.

Hilaria jamesii (Torr.) Benth.

Koeleria cristata (L.) Pers.

Oryzopsis hymenoides (Roem. & Schult.)

Ricker

Phleum pratense L.

Phragmites communis Trin.

Poa canbyi (Scribn.) Piper

Poa fendleriana (Steud.) Vasey

Poa pratensis L.

Poa secunda Presl.

Puccinellia distans (L.) Park.

Sitanian hystris (Nutt.) J. G. Smith

Spartina gracilis Trin.

Sporobolus cryptandrus (Torr.) A. Gray

Stipa comata Trin. & Rupr.

Stipa viridula Trin.

Crested wheatgrass

Streambank quackgrass

Bluebunch wheatgrass

Western wheatgrass

Pubescent western

wheatgrass

Thickspike wheatgrass

Fendler threeawn

Hairy brome

Smooth brome

Cheatgrass brome

Plains reedgrass

Common orchardgrass

Inland saltgrass

Basin wildrye

Common sixweeks fescue

Meadow fescue

Foxtail barley

Bobtail barley

Galleta hilaria

Prairie junegrass

Indian ricegrass

Common timothy

Common reed

Canby bluegrass

Mutton bluegrass

Kentucky bluegrass

Sandburg bluegrass

Weeping alkaligrass

Bottlebrush squirreltail

Alkali cordgrass

Sand Dropseed

Needleandthread

Green needlegrass

Appendix D

Polemoniaceae

Phlox Family

Gilia aggregata (Pursh) Spreng.
Gilia congesta Hook.
Gilia leptomeria A. Gray
Gilia pumila Nutt.
Gilia sinuata Dougl. ex Benth.
 var. *tweedyi* (Rydb.) Cronq.

Skyrocket *gilia*
 Ballhead *gilia*
 Smallflower *gilia*
 Dwarf *gilia*

Rosy *gilia*

Polygonaceae

Buckwheat Family

Eriogonum brevicaule Nutt.
Eriogonum cernuum Nutt.
Eriogonum microthecum Nutt.
 var. *laxiflorum* Benth.
Eriogonum ovalifolium Nutt.
Eriogonum umbellatum Torr.
 var. *intectum* A. Nels.
Polygonum aviculare L.
Polygonum sawatchense Small
Rumex hymenosepalus Torr.
 var. *salinus* (A. Nels.) Rechinger
Rumex triangulivalvis (Danser) Rech. f.

Shortstem wildbuckwheat
 Nodding wildbuckwheat

Slenderbush wildbuckwheat
 Cushion wildbuckwheat

Sulphur wildbuckwheat
 Prostrate knotweed
 Sawatch knotweed

Canaigre dock
 Trianglevalved dock

Portulacaceae

Purslane Family

Lewisia rediviva Pursh

Bitterroot *lewisia*

Ranunculaceae

Crowfoot Family

Delphinium nelsoni Greene
Ranunculus cymbalaria Pursh
 var. *saximontana* Fern.

Nelson larkspur

Shore buttercup

Rosaceae

Rose Family

Amelanchier alnifolia Nutt.
Cercocarpus montanus Raf.
Potentilla anserina (L.) Rydb.
Prunus virginiana L.
 var. *melanocarpa* (A. Nels.) Sarg.
Purshia tridentata (Pursh) D.C.
Rose woodsii Lindl.

Saskatoon serviceberry
 True mountainmahogany
 Silver cinquefoil

Black chokecherry
 Antelope bitterbrush
 Woods rose

Rubiaceae

Madder Family

**Galium coloradoense* W.F. Wright
Galium bifolium S. Wats.

Colorado bedstraw
 Twinleaf bedstraw

Salicaceae

Willow Family

Populus tremuloides Michx.
Populus angustifolia James ex. Longs

Quaking aspen
 Narrowleaf poplar
 cottonwood

Appendix D

Santalaceae

Sandalwood Family

Comandra pallida A.D.C.

Pale bastardtoadflax

Scrophulariaceae

Figwort Family

Castilleja chromosa A. Nels.

Desert indianpaintbrush

Collinsia parviflora Doug. ex Lindl.

Smallflowered blueeyedmary

Cordylanthus ramosus Nutt. ex. Benth.

Bushy birdbeak

Penstemon fremontii T. & G.

Fremont penstemon

*Penstemon mensarum Pennell

Grandmesa penstemon

Penstemon pachyphyllus A. Gray

Thickleaf penstemon

Penstemon radicosus A. Nels.

Matroot penstemon

Penstemon strictus Benth.

Rockymountain penstemon

Tamaricaceae

Tamarisk Family

Tamarix pentandra Pall.

Saltcedar tamarisk

Violaceae

Violet Family

Viola nuttallii Pursh

var. vallicola (A. Nels.) St. John

Nuttall violet

APPENDIX E

Codes for designation of plant species

Appendix E

Codes for Designation of Plant Species

The following codes, based upon the scientific names, are used for the designation of plant species in field recording and in the presentation of data summaries. All plants collected and identified are included in the code list. The plants have been alphabetized within three life-form groups; trees and shrubs, grasses and grass-like plants, and forbs. Species, such as *Chrysothamnus nauseosus*, with several varieties or subspecies represented are given a single code designation in most instances. Field identification and determination of varietal forms is often difficult, although much ecological information may be obtained. Two genera, *Crepis* and *Arabis*, have proved difficult to separate into species in the field and are simply designated collectively as *Crepis* spp. and *Arabis* spp. in the data presentation, although species codes are provided. Common names follow those presented by Beetle (1970).

Code	Scientific Name	Common Name	Longevity
Amal	<i>Amelanchier alnifolia</i>	Saskatoon serviceberry	Perennial
Arfr	<i>Artemisia frigida</i> 1/	Fringed sagewort	"
Arlu	<i>Artemisia ludoviciana</i> 1/	Louisiana sagewort	"
Arno	<i>Artemisia nova</i>	Black sagebrush	"
Arpe	<i>Artemisia pedatifida</i> 1/	Birdfoot sagewort	"
Arsp	<i>Artemisia spinescens</i> 1/	Bud sagewort	"
Artr	<i>Artemisia tridentata</i>	Basin big sagebrush	"
Atca	<i>Atriplex canescens</i>	Fourwing saltbush	"
Atco	<i>Atriplex confertifolia</i>	Shadscale saltbush	"
Atga	<i>Atriplex gardneri</i> 1/	Nuttall saltbush	"
Cemo	<i>Cercocarpus montanus</i>	True mountainmahogany	"
Chna	<i>Chrysothamnus nauseosus</i>	Rubber rabbitbrush	"
Chpa	<i>Chrysothamnus parryi</i>	Parry rabbitbrush	"
Chvi	<i>Chrysothamnus vicidiflorus</i>	Douglas rabbitbrush	"
Eula	<i>Eurotia lanata</i> 1/	Common winterfat	"
Grsp	<i>Grayia spinosa</i>	Spiny hopsage	"
Xasa	<i>Xanthocephalum sarothraei</i> 1/	Broom snakeweed	"
Juos	<i>Juniperus osteosperma</i>	Utah juniper	"
Koam	<i>Kochia americana</i> 1/	Greenmolly summercypress	"
Magl	<i>Machaeranthera glabriuscula</i> 1/	Alkali aster	"
Poan	<i>Populus angustifolia</i>	Narrowleaf poplar	"
Potr	<i>Populus tremuloides</i>	Quaking aspen	"
Prvi	<i>Prunus virginiana</i>	Black chokecherry	"
Putr	<i>Purshia tridentata</i>	Antelope bitterbrush	"
Rhtr	<i>Rhus trilobata</i>	Skunkbush sumac	"
Rowo	<i>Rosa woodsii</i>	Woods rose	"
Save	<i>Sarcobatus vermiculatus</i>	Black greasewood	"
Syor	<i>Symphoricarpos oreophilus</i>	Mountain snowberry	"
Tape	<i>Tamarix pentandra</i>	Saltcedar tamarisk	"
Teca	<i>Tetradymia canescens</i>	Gray horsebrush	"
Tenu	<i>Tetradymia nuttallii</i>	Nuttall horsebrush	"

1/ = Suffrutescent or half-shrubs

Appendix E

Plant Codes (Cont'd)

Code	Scientific Name	Common Name	Longevity
<u>Grasses and Grass-like Plants</u>			
Agcr	Agropyron cristatum	Crested wheatgrass	Perennial
Agsp	Agropyron spicatum	Bluebunch wheatgrass	"
Agsm	Agropyron smithii	Western wheatgrass	"
Agda	Agropyron dasystachyum	Thickspike wheatgrass	"
Agri	Agropyron riparium	Streambank quackgrass	"
Arfe	Aristida fendleriana	Fendler threeawn	"
Brco	Bromus commutatus	Hairy brome	Annual
Brin	Bromus inermis	Smooth brome	Perennial
Brte	Bromus tectorum	Cheatgrass brome	Annual
Cael	Carex eleocharis	Needleleaf sedge	Perennial
Cafi	Carex filifolia	Threadleaf sedge	"
Camo	Calamagrostis montanensis	Plains reedgrass	"
Dagl	Dactylis glomerata	Common orchardgrass	"
Disp	Distichlis spicata	Inland saltgrass	"
Elci	Elymus cineris	Basin wildrye	"
Fepr	Festuca pratense	Meadow fescue	"
Feoc	Festuca octoflora	Common sixweeks fescue	Annual
Hoju	Hordeum jubatum	Foxtail barley	"
Hoca	Hordeum jubatum var. caespitosum	Bobtail barley	"
Hija	Hilaria jamesii	Galleta hilaria	Perennial
Kocr	Koeleria cristata	Prairie junegrass	"
Orhy	Oryzopsis hymenoides	Indian ricegrass	"
Phco	Phragmites communis	Common reed	"
Phpr	Pheum pratense	Common timothy	"
Poca	Poa canbyi	Canby bluegrass	"
Pofe	Poa fendleriana	Mutton bluegrass	"
Popr	Poa pratensis	Kentucky bluegrass	"
Pose	Poa secunda	Sandberg bluegrass	"
Pudi	Puccinellia distans	Weeping alkaligrass	"
Sihy	Sitanion hystrix	Bottlebrush squirreltail	"
Spgr	Spartina gracilis	Alkali cordgrass	"
Spcr	Sporobolus cryptandrus	Sand dropseed	"
Stco	Stipa comata	Needleandthread	"
Stvi	Stipa viridula	Green needlegrass	"
Scne	Scirpus nevadensis	Nevada bulrush	"
Scpa	Scirpus paludosus	Alkali bulrush	"
Trma	Triglochin maritima	Marsh arrowgrass	"
Juba	Juncus balticus	Baltic rush	"

Forbs

Acmi	Achillea millefolium	Common yarrow	Annual
Aggl	Agoseris glauca	Pale agoseris	Perennial
Alac	Allium acuminatum	Tapertip onion	"
Alte	Allium textile	Prairie onion	"
Alde	Alyssum desertorum	Desert alyssum	Annual
Amgr	Amaranthus gracizans	Prostrate pigweed	"
Amre	Amaranthus retroflexus	Redroot pigweed	"

Appendix E

Plant Codes (Cont'd)

Code	Scientific Name	Common Name	Longevity
<u>Forbs Cont'd</u>			
Anbr	Androstephium breviflorum	Purple funnellily	Perennial
Andi	Antennaria dimorpha	Low pussytoes	"
Anro	Antennaria rosea	Rose pussytoes	Perennial
Arco	Arabis cobrensis	Cobren rockcress	"
Arcr	Arabis crandellii	Crandell rockcress	"
Arho	Arabis holboellii	Holboell rockcress	"
Arli	Arabis lignifera	Woody rockcress	"
Arpu	Arabis pulchra	Beauty rockcress	"
Arfe	Arenaria fendleri	Fendler sandwort	"
Arho	Arenaria hookeri	Hooker sandwort	"
Arnu	Arenaria nuttallii	Nuttall sandwort	"
Ascr	Asclepias cryptoceras	Pallid milkweed	"
Assp	Asclepias speciosa	Showy milkweed	"
Asad	Aster adsendens	Longleaf aster	"
Asar	Aster arenosus	Smallflower aster	"
Aspa	Aster pauciflorus	Fewhead aster	"
Asci	Astragalus cibaricus	Silky milkvetch	"
Asdi	Astragalus diversifolius	Meadow milkvetch	"
Asdr	Astragalus drummondii	Drummond milkvetch	"
Asge	Astragalus geyeri	Geyer milkvetch	Annual
Asha	Astragalus haydenianus	Hayden milkvetch	Perennial
Asje	Astragalus jejunus	Starveling milkvetch	Perennial
Aspe	Astragalus pectinatus	Fineleaved milkvetch	"
Aspb	Astragalus pubentissimus	Greenriver milkvetch	"
Aspu	Astragalus purshii	Pursh milkvetch	"
Assp	Astragalus spatulatus	Spoonleaf milkvetch	"
Aste	Astragalus tenellus	Pulse milkvetch	"
Atar	Atriplex argentea	Tumbling saltbush	Annual
Atdi	Atriplex dioeca	Scurfless saltbush	"
Atpa	Atriplex patula	Fathen saltbush	"
Atwo	Atriplex wolffii	Wolf saltbush	"
Basa	Balsamorhiza sagittata	Arrowleaf balsamroot	Perennial
Bahy	Bassia hyssopifolia	Fivehock smotherweed	Annual
Canu	Calochortus nuttallii	Sego mariposalily	Perennial
Cami	Camelina microcarpa	Littleseed falseflax	Annual
Capu	Cardaria pubescens	Hairy whitetop	Perennial
Cach	Castilleja chromosa	Desert indianpaintbrush	"
Cacr	Caulanthus crassicaulis	Thickstem wildcabbage	"
Chdo	Chaenactis douglasii	Douglas dustymaiden	"
Chat	Chenopodium atrovirens	Dark goosefoot	Annual
Chbe	Chenopodium berlandieri	Pitseed goosefoot	"
Chde	Chenopodium dessicatum	Desert goosefoot	"
Chfr	Chenopodium fremontii	Fremont goosefoot	"
Chte	Chorispora tenella	Common bluemustard	"
Ciar	Cirsium arvense	Canada thistle	Perennial
Cice	Cirsium centaureae	Fringed thistle	Perennial
Cllu	Cleome lutea	Yellow beepplant	Annual
Clse	Cleome serrulata	Rockymountain beepplant	Annual
Copa	Collinsia parviflora	Smallflowered blueeyedmary	Annual
Copal	Comandra pallida	Pale bastardtoadflax	Perennial

Appendix E

Plant Codes (Cont'd)

Code	Scientific Name	Common Name	Longevity
<u>Forbs</u>			
Cora	<i>Cordylanthus ramosus</i>	Bushy birdbeak	Annual
Crac	<i>Crepis acuminata</i>	Tapertip hawksbeard	Perennial
Crmo	<i>Crepis modocensis</i>	Yellowstone hawksbeard	"
Croc	<i>Crepis occidentalis</i>	Western hawksbeard	"
Crbr	<i>Cryptantha bradburiana</i>	Minerscandle cryptantha	"
Crca	<i>Cryptantha caespitosa</i>	Tufted cryptantha	"
Crfl	<i>Cryptantha flava</i>	Yellow cryptantha	"
Crfc	<i>Cryptantha flavoculata</i>	Roughseed cryptantha	"
Crke	<i>Cryptantha kelseyana</i>	Kelsey cryptantha	Annual
Crwa	<i>Cryptantha watsonii</i>	Watson cryptantha	Annual
Cyac	<i>Crymopterus acaulis</i>	Stemless springparsley	Perennial
Cybu	<i>Cymopterus bulbosus</i>	Onion springparsley	Perennial
Dene	<i>Delphinium nelsoni</i>	Nelson larkspur	Perennial
Depi	<i>Descurania pinnata</i>	Pinnate tansymustard	Annual
Deso	<i>Descurania sophia</i>	Flixweed tansymustard	Annual
Eppa	<i>Epilobium paniculatum</i>	Sticky willowherb	Annual
Eqar	<i>Equisetum arvense</i>	Field horsetail	Perennial
Erea	<i>Erigeron eatoni</i>	Eaton fleabane	"
Eren	<i>Erigeron engelmanni</i>	Engelmann fleabane	"
Erne	<i>Erigeron nematophyllus</i>	Mat fleabane	"
Erpu1	<i>Erigeron pulcherrimus</i>	Basin fleabane	"
Erpu	<i>Erigeron pumilus</i>	Low fleabane	"
Erbr	<i>Eriogonum brevicaulae</i>	Shortstem wildbuckwheat	"
Erce	<i>Eriogonum cernuum</i>	Nodding wildbuckwheat	Annual
Ermi	<i>Eriogonum microthecum</i>	Slenderbush wildbuckwheat	Perennial
Erov	<i>Eriogonum ovalifolium</i>	Cushion wildbuckwheat	"
Erum	<i>Eriogonum umbellatum</i>	Sulphur wildbuckwheat	"
Eras	<i>Erysimum asperum</i>	Plains wallflower	"
Euro	<i>Euphorbia robusta</i>	Robust spurge	"
Frac	<i>Franseria acanthicarpa</i>	Annual bursage	Annual
Gaco	<i>Galium coloradense</i>	Colorado bedstraw	Perennial
Gara	<i>Gayophytum ramosissimum</i>	Branchy groundsmoke	Annual
Giaa	<i>Gilia aggregata</i>	Skyrocket gilia	Perennial
Gico	<i>Gilia congesta</i>	Ballhead gilia	Perennial
Gile	<i>Gilia leptomeria</i>	Smallflower gilia	Annual
Gipu	<i>Gilia pumila</i>	Dwarf gilia	Annual
Gisi	<i>Gilia sinuata</i>	Rosy gilia	Annual
Gisp	<i>Gilia spicata</i>	Spike gilia	Perennial
Gite	<i>Gilia tenerrima</i>	Tawny gilia	Annual
Gile	<i>Glycyrrhiza lepidota</i>	American licorice	Perennial
Grsq	<i>Grindellia squarrosa</i>	Curlycup gumweed	Perennial
Gypa	<i>Gymnostris parvula</i>	Leafless flasephlox	Annual
Hagl	<i>Halogeton glomeratus</i>	Common halogeton	Annual
Haac	<i>Haplopappus acaulis</i>	Stemless goldenweed	Perennial
Haar	<i>Haplopappus armerioides</i>	Thrifty goldenweed	"
Hala	<i>Haplopappus lanceolatus</i>	Lanceleaf goldenweed	"
Hebo	<i>Hedysarum boreale</i>	Northern sweetvetch	"
Hean	<i>Helianthus annuus</i>	Common sunflower	Annual
Hyfi	<i>Hymenopappus filifolius</i>	Fineleaf hymenopappus	Perennial

Plant Codes (Cont'd)

Code	Scientific Name	Common Name	Longevity
<u>Forbs</u>			
Hyri	Hymenoxys richardsonii	Pingue actinea	Perennial
Ivax	Iva axillaris	Poverty sumpweed	Perennial
Ivxa	Iva xanthifolia	Marshelder sumpweed	Annual
Lare	Lappula redowskii	Bluebur stickseed	Annual
Lemo	Lepidium montanum	Mountain pepperweed	Perennial
Lepe	Lepidium perfoliatum	Clasping pepperweed	Annual
Lepu	Leptodactylon pungens	Granite gilia	Perennial
Leal	Lesquerella alpina	Tufted bladderpod	Perennial
Lelu	Lesquerella ludoviciana	Foothill bladderpod	Perennial
Lere	Lewisia rediviva	Bitterroot lewisia	Perennial
Lise	Linanthus septentrionalis	Sevenstar flaxflower	Annual
Lile	Linum lewisii	Lewis flax	Perennial
Liin	Lithospermum incisum	Narrowleaf gromwell	Perennial
Liru	Lithospermum ruderales	Wayside gromwell	Perennial
Lofo	Lomatium foeniculaceum	Hairyseed lomatium	Perennial
Losi	Lomatium simplex	Narrowleaf lomatium	Perennial
Luar	Lupinus argenteus	Silvery lupine	Perennial
Lupu	Lupinus pusillus	Rusty lupine	Annual
Lygr	Lygodesmia gradiflora	Largeflowered skeletonplant	Perennial
Maca	Machaeranthera canescens	Hoary tansyaster	Perennial
Magr	Machaeranthera grindelioides	Nuttall goldenweed	Perennial
Maso	Malacothrix sonchoides	Desert dandelion	Annual
Meal	Mentzelia albicaulis	Whitstem mentzelia	Annual
Mede	Mentzelia decapetala	Tenpetal mentzelia	Perennial
Medi	Mentzelia dispersa	Bushy mentzelia	Perennial
Meob	Mertensia oblongifolia	Oblongleaf bluebells	Perennial
Mesa	Medicago satira	Alfalfa medic	Perennial
Meof	Melilotus officinalis	Yellow sweetclover	Annual
Migr	Microsteris gracilis	Microsteris	Annual
Monu	Monolepis nuttalliana	Nuttall monolepis	"
Mopu	Monolepis pusilla	Low monolepis	"
Nade	Nama densum	Leafy nama	"
Oean	Oenothera andina	Andean sundrops	"
Oeca	Oenothera caespitosa	Tufted eveningprimrose	Perennial
Oeco	Oenothera contorta	Plains eveningprimrose	Annual
Oepa	Oenothera pallida	Pale eveningprimrose	Perennial
Oesc	Oenothera scapoidea	Barestem eveningprimrose	Annual
Oppo	Opuntia polyacantha	Plains pricklypear	Perennial
Orfa	Orebanche fasciculata	Purple broomrape	"
Oxmu	Oxytropis multiceps	Flowery loco	"
Oxse	Oxytropis sericea	Silky loco	"
PeFr	Penstemon fremontii	Fremont penstemon	"
Peme	Penstemon mensarum	Grandmesa penstemon	"
Pepa	Penstemon pachyphyllus	Thickleaf penstemon	"
Pera	Penstemon radicosus	Matroot penstemon	"
Pest	Penstemon strictus	Rockymountain penstemon	"
Phgl	Phacelia glandulosa	Desert phacelia	Annual
Phho	Phlox hoodii	Hoods phlox	"
Phlo	Phlox longifolia	Longleaf phlox	"
Phau	Physaria australis	Common twinpod	"
Plpa	Plantago patagonica	Wooly plantain	"

Appendix E

Plant Codes (Cont'd)

Code	Scientific Name	Common Name	Longevity
<u>Forbs</u>			
Posa	Polygonum sawatchense	Sawatch knotweed	Annual
Poan	Potentilla anserina	Silverweed cinquefoil	Perennial
Psia	Psoralea lanceolata	Lemon scurfpea	Perennial
Ptte	Pteryxia terebinthina	Ferny springparsley	"
Racy	Ranunculus cymbalaria	Shore buttercup	"
Ruhy	Rumex hymenosepalus	Canaigre dock	"
Rutr	Rumex triangulivalvis	Trianglevalved dock	"
Saeu	Salicornia europaea	Marshfire glasswort	Annual
Saka	Salsola kali	Common russiantistle	Annual
Sein	Senecio integerrimus	Lambstongue groundsel	Perennial
Siel	Sisymbrium elegans	Showy hedgemustard	Annual
Sili	Sisymbrium linifolium	Narrowleaf hedgemustard	Perennial
Spcu	Sphaeralcea coccinea	Scarlet globemallow	"
Stpi	Stanleya pinnata	Desert princesplume	"
Stru	Stephanomeria runcinata	Desert wirelettuce	"
Stlo	Streptanthella longirostris	Beakpod nippletwist	Annual
Stcor	Streptanthus cordatus	Heartleaf twistflower	Perennial
Sude	Suaeda depressa	Pursh seepweed	Annual
Sufr	Suaeda fruticosa	Alkali seepweed	Perennial
Suni	Suaeda nigra	Black seepweed	Annual
Suoc	Suaeda occidentalis	Western seepweed	Annual
Tanu	Tenacetum nuttallii	Nuttall tansy	Perennial
Taof	Taraxacum officinale	Common dandelion	Perennial
Thar	Thlaspi arvense	Field pennycress	Annual
Thin	Thelypodium integrifolium	Entireleaved thelypod	Perennial
Thrh	Thermopsis rhombifolia	Prairie thermopsis	"
Toin	Townsendia incana	Hoary townsendia	"
Tost	Townsendia strigosa	Hairy townsendia	"
Trpr	Tragopogon pratensis	Meadow salsify	Annual
Trgy	Trifolium gymnocarpon	Hollyleaf clover	Perennial
Trmi	Tripterocalyx micranthus	Annual sandpuffs	Annual
Viam	Vicia americana	American vetch	Perennial
Vinu	Viola nuttallii	Nuttall violet	"
Wysc	Wyethia scabra	Roughleaf wyethia	"
Xast	Xanthium strumarium	Common cocklebur	Annual

APPENDIX F

Site description and location of permanent plot (1' x 1') transects
within pastures of the grazing systems study area west of Baggs, Wyoming

Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C6 Tr1	SW¼ SE¼ Sec. 27 T13N R92W	Artr-Agsm	E	0.5	--	E to W
	From Poison Butte Exclosure I proceed W and SW 2.15 miles W and SW or from break from Devils Canyon to rim through juniper stand proceed 0.33 miles NE. Transect 100 ft. W of road and small juniper tree beside road.					
C7 Tr1	SW¼ SW¼ Sec. 25 T13N R92W	Artr-Agsm- Sprayed	N	2	--	S to N
	From Poison Butte Exclosure I proceed 0.55 miles W. Transect 100 ft. N of road.					
C8 Tr1	SE¼ NE¼ Sec. 25 T13N R92W	Artr-Agsm- Sprayed	NE	0.5	3	N to S
	From road fork on rim above Tincan Hill take W fork; proceed 0.65 miles W or 200 ft. E of valley with reservoir in it. Transect 65 ft. S of road and 33 ft. NE of BLM trend plot.					
C9 Tr1	SW¼ SW¼ Sec. 30 T13N R92W	Artr-Agsm	N	1	1	N to S
	From road fork on rim above Tincan Hill take SW fork; proceed 0.82 miles SW or proceed 0.45 miles E from Poison Butte Exclosure I. Transect 75 yards S of road and steel post, 35 ft. E of BLM trend plot, and 90 ft. NE of BLM project marker.					
C10 Tr1	SE¼ NW¼ Sec. 2 T12N R92W	Artr-Agsm	SE	3	4	SWtoNE
	From main road forks in Poison Butte proceed 0.3 miles E on Poison Butte Road; turn N proceed 0.7 miles N to well location site; proceed 0.15 miles NE on road fork leading NE; turn N proceed 0.15 miles N on road fork leading N. Transect 100 ft. N of steel post and road and 15 ft. E of trail.					

Oppenhiemer Allotment - East Pasture

Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C1 Tr1	NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 4 T12N R92W	Artr-Agsm- Oppo	SW	3	--	E to W
	From Poison Butte-Oppenhiemer East cattleguard on Poison Butte Road turn N along fenceline road; proceed 0.15 miles N to 37th steel fence post. Transect 100 ft. W of steel post and road.					
C2 Tr1	SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 16 T12N R92W	Artr-Agsm	SW	3	3	NWtoSE
	From SW cattleguard between Poison Butte-Oppenhiemer East proceed 0.75 miles SW (just past well location site). Transect 150 ft. E of road, 30 ft. NW of BLM trend plot, and 125 ft. N of steel post (steel post 175 ft. E of road).					
C3 Tr1	NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 9 T12N R92W	Artr-Agsm- Sprayed	N	3	--	E to W
	From SW cattleguard between Poison Butte-Oppenhiemer East proceed 1.35 miles W along rim to well location site; proceed 0.25 miles N on trail from well location site. Transect 55 ft. W of road and steel post.					
C4 Tr1	SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 5 T12N R92W	Artr-Agsm	SW	0.5	--	E to W
	From Poison Butte-Oppenhiemer East cattleguard on Poison Butte Road proceed 1.35 miles W (past mine sites); turn S on siesmagraph trail proceed 0.25 miles S. Transect 100 ft. W of road.					
C5 Tr1	SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 29 T13N R92W	Artr-Agsm- Sprayed	NE	0.5	2	S to N
	From Poison Butte-Oppenhiemer East cattleguard on Poison Butte Road proceed 1 mile W; turn N proceed 1.45 miles N (past mine sites) to juniper ridge; turn on NE fork proceed 0.4 miles NE; turn S proceed 0.15 miles S on siesmagraph trail. Transect 200 ft. NW of section marker and 140 ft. W of BLM project marker.					

Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C6 Tr1	SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 29 T13N R92W	Artr-Agsm- Sprayed	NNE	1.5	--	E to W
<p>From Poison Butte-Oppenhimer East cattleguard on Poison Butte Road proceed 1 mile W; turn N proceed 1.45 miles N (past mine sites) to juniper ridge; take middle fork NW proceed 1 mile NW or from Oppenhimer East-Oppenhimer West NW gate proceed 0.7 miles SE. Transect 60 ft. S of road and steel post.</p>						
C7 Tr1	NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 33 T13N R92W	Artr-Agsm	E	0.25	--	N to S
<p>From Poison Butte- Oppenhimer East cattleguard on Poison Butte Road proceed 1 mile W; turn N proceed 1.45 miles N (past mine sites) juniper ridge; turn on NE fork proceed 0.9 miles NE. Transect 50 ft. S of road.</p>						
C8 Tr1	NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 32 T13N R92W	Juos	S	10	--	N to S
<p>From Poison Butte-Oppenhimer East cattleguard on Poison Butte Road proceed 1 mile W; turn N proceed 1.45 miles N (past mine sites) to juniper ridge; turn on NW fork proceed 0.35 miles NW in juniper type along rim. Transect 20 ft. S of road.</p>						

Oppenheimer Allotment - West Pasture

Site No. Code	Legal Location	Vegetation Type	Exposure	(Degrees)	Paired with BLM Plot No.	Transect Direction
C1 Tr1	SE½ NW¼ Sec. 7 T12N R92W	Artr-Agsm	SE	1	--	W to E
	From Oppenhiemer East-Oppenhiemer West cattleguard on Poison Butte Road proceed 1.25 miles W; turn SW proceed 0.1 mile SW; turn SE proceed 0.8 miles SE. Transect 75 ft. E of road across draw.					
C2 Tr1	SE½ SW¼ Sec. 6 T12N R92W	Artr-Agsm- Sprayed	NNE	2	--	S to N
	From Oppenhiemer East-Oppenhiemer West cattleguard on Poison Butte Road proceed 0.65 miles W; turn S on siesmagraph trail proceed 0.35 miles S. Transect 75 ft. E. of road.					
C3 Tr1	NE¼ SE¼ Sec. 1 T12N R92W	Artr-Agsm- Sprayed	N	0.25	1	S to N
	From Oppenhiemer East-Oppenhiemer West cattleguard on Poison Butte Road proceed 1.05 miles W; turn N on siesmagraph trail-proceed 0.25 miles N; turn W proceed 0.1 miles W across sprayed area to section marker and steel post. Transect 250 ft. W of section marker and steel post, 100 ft. W of BLM project marker, and 30 ft. SW of BLM trend plot.					
C4 Tr1	NW¼ SW¼ Sec. 1 T12N R93W	Artr-Agsm	N	2	--	E to W
	From Oppenhiemer East- Oppenhiemer West cattleguard on Poison Butte Road proceed 2.15 miles W or from Oppenhiemer West-Pasture C cattleguard on Poison Butte Road proceed 0.65 miles E; turn N on siesmagraph trail proceed 0.25 miles NNW (cross pipeline). Transect 35 ft. W of road and 45 ft. W of wooden post.					
C5 Tr1	NE¼ NE¼ Sec. 6 T12N R92W	Artr-Agsm	SE	0.75	--	NEtoSW
	From Oppenhiemer East-Oppenhiemer West cattleguard on Poison Butte Road proceed 0.1 miles W; turn NW proceed 150 yards NW; turn N on siesmagraph trail proceed 0.2 miles N. Transect 180 ft. W of road.					

Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C6 Tr1	SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 30 T13N R92W	Artr-Agsm	NNE	1	4	E to W
	From Poison Butte-Oppenhimer East cattleguard on Poison Butte Road proceed 1 mile W; turn N proceed 1.45 miles N (past mine sites) to juniper ridge; take middle fork proceed 1.7 miles NNW to Oppenhimer East-Oppenhimer West NW gate; turn S along fence line road proceed 0.05 miles SE; turn W on West fork of siesmagraph trail proceed 0.5 miles WSW. Transect 100 ft. WNW of steel post and N of road.					
C7 Tr1	NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 26 T13N R93W	Artr-Agsm	S	1	--	NWtoSE
	From Red Creek Bridge on Poison Butte road proceed 0.15 miles NW; turn NE proceed 2.4 miles NE to Oppenhimer West-Pasture C NW gate; proceed 0.5 miles N from gate or from intersection of Poison Butte Road - Shell Creek Stock Trail proceed 3.05 miles E (past reservoir); turn S proceed 0.75 miles SW to Oppenhimer West NW gate; proceed 0.15 miles S from gate. Transect 55 ft. ESE of road.					
C9 Tr1	NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 31 T13N R92W	Juos	S	3-8	--	N to S
	From Poison Butte-Oppenhimer East cattleguard on Poison Butte Road proceed 1 mile W; turn N proceed 1.45 miles N (past mine sites) to juniper ridge; turn on NW fork proceed 0.75 miles NW in juniper type along rim to Oppenhimer East-Oppenhimer West gate; proceed 0.25 miles W from gate. Transect 15 ft. S. of road.					

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Powder Rim Allotment - Pasture A

Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C1 Tr1	NE¼ SW¼ Sec. 25 T13N R95W	Arthr-Agsm- Sprayed	NE	2	2	W to E
From Pasture A S-SE gate off Cherokee Trail Road to Pasture A Exclosure proceed 0.15 miles W from gate. Transect 100 ft. NNE of steel post and road.						
C2 Tr1	SW¼ NE¼ Sec. 25 T13N R95W	Arthr-Agsm- Sprayed	NE	1	--	N to S
From Pasture A S-SE gate off Cherokee Trail Road to Pasture A Exclosure proceed 0.15 miles W from gate; turn N proceed 0.4 miles N. Transect 50 ft. E of road and steel post.						
C3 Tr1	NE¼ SW¼ Sec. 24 T13N R95W	Arthr-Agsm	NE	0.5	--	W to E
From Pasture A S-SE gate off Cherokee Trail Road to Pasture A Exclosure proceed 0.15 miles W from gate; turn N proceed 1 mile. Transect 50 ft. E of road and steel post.						
C4 Tr1	NW¼ NE¼ Sec. 24 T13N R95W	Arthr-Agsm	W	1	--	E to W
From Pasture A S-SE gate off Cherokee Trail Road to Pasture A Exclosure proceed 0.15 miles W from gate; turn N proceed 1.85 miles N. Transect 50 ft. W of road and 65 ft. W of wooden post.						
C4 Tr2	NE¼ NW¼ Sec. 24 T13N R95W	Arthr-Agsm	E	2	--	E to W
Proceed as described for previous transect (C4 Tr1). Transect 435 ft. W of road and 450 ft. W of wooden post across draw from transect C4 Tr1.						
C5 Tr1	NE¼ SE¼ Sec. 28 T13N R95W	Arthr-Agsm	NNW	2	1	S to N
From Pasture D-Pasture B cattleguard on Cherokee Trail Road proceed 2.8 miles W; turn NW proceed 1.05 miles N (through Pasture A gate) to Chimney Reservoir or from Shell Creek Stock Trail turn S in Sec. 21 T13N R95W proceed 0.4 miles S to Pasture A gate; from gate proceed 0.9 miles S to Chimney Reservoir; proceed 0.1 miles E on siesmagraph trail across draw from reservoir. Transect 100 ft. N of road and BLM project marker.						

Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C6 Tr1	SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 28 T13N R95W	Arthr-Agsm	NE	2	--	NWto SE
From Pasture D-Pasture B cattleguard on Cherokee Trail Road proceed 2.8 miles W; turn NW proceed 1.35 miles N (through Pasture A gate) or from Shell Creek Stock Trail turn S in Sec. 21 T13N R95W proceed 0.4 miles S to Pasture A gate; from gate proceed 0.6 miles S. Transect 50 ft. E of road.						
C7 Tr1	NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 34 T13N R95W	Arthr-Agsp	NNE	3.5	--	SEtoNW
From Pasture D-Pasture B cattleguard on Cherokee Trail Road proceed 0.9 miles W; turn N proceed 0.2 miles N (through Pasture A gate); turn W proceed 0.85 miles W or from Pasture A S-SE gate off Cherokee Trail Road to Pasture A Exclosure proceed 2.2 miles W from gate (past Pasture A Exclosure). Transect 100 ft. N of road. Transect also due N of Pasture B transect C5 Tr1 about 0.2 miles.						
C8 Tr1	SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 29 T13N R95W	Juos	E	12	--	SEtoNW
From Pasture B NW cattleguard on Cherokee Trail Road enter Pasture A gate just N and E of cattleguard; proceed 0.4 miles E on fenceline road; turn N proceed 0.6 miles N on trail down into valley. Transect 175 ft. W of road across road.						
C8 Tr2	SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 29 T13N R95W	Juos	W	8	--	SEtoNW
Proceed as described for previous transect (C8 Tr1). Transect 675 ft. W of road and 500 ft. W of C8 Tr1 just over crest of juniper ridge. This was formerly part of browse transect and is the beginning of the fifth transect.						

Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C1 Tr1	NE¼ NW¼ Sec. 16 T12N R95W	Atga	--	0.0	1	N to S
	From Pasture B W-SW gate proceed 0.2 miles E or from West Fork Cherokee Creek proceed 2.75 miles W. Transect 95 ft. S of road and 110 ft. S of steel post.					
C2 Tr1	SW¼ SW¼ Sec. 10 T12N R95W	Artr-Agsm	S	1.5	--	S to N
	From Pasture B W-SW gate proceed 1.25 miles E or from West Fork Cherokee Creek proceed 1.45 miles W. Transect 50 ft. N of road and steel post.					
C3 Tr1	NE¼ NE¼ Sec. 15 T12N R95W	Chvi-Orhy	NE	1.75	2	N to S
	From Pasture B W-SW gate proceed 2.15 miles E or from West Fork Cherokee Creek proceed 0.55 miles W. Transect 65 ft. S of road.					
C4 Tr1	NW¼ SE¼ Sec. 12 T12N R95W	Artr-Cafi	SSW	4	3	E to W
	From Pasture D-Pasture B SW cattleguard proceed 0.95 miles W and S; turn W proceed 0.75 miles W or from road to windmill proceed 185 yards E. Transect 135 ft. S of road and steel post.					
C5 Tr1	SE¼ NW¼ Sec. 34 T13N R95W	Artr-Agsp	N	3	--	E to W
	From Pasture D-Pasture B cattleguard on Cherokee Trail Road proceed 1.7 miles W. Transect 100 ft. N of road.					
C6 Tr1	SE¼ SW¼ Sec. 15 T12N R95W	Artr-Agsm	NNW	0.5	--	S to N
	From Pasture B W-SW gate proceed 1.15 miles E or from West Fork Cherokee Creek proceed 1.55 miles W; turn S proceed 0.9 miles S; turn NE proceed 0.05 miles NE; turn SE proceed 0.25 miles SE on to uplands. Transect 75 ft. E of road and steel post.					

Appendix F

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Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C7 Tr1	NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 7 T12N R94W	Arpe	W	0.5	4	S to N
	From Pasture D-Pasture B SW cattleguard proceed 0.13 miles W. Transect 130 ft. N. of road.					
C8 Tr1	NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 4 T12N R95W	Artr-Agsm	S	3	--	E to W
	From Pasture D-Pasture B cattleguard on Cherokee Trail Road proceed 2.3 miles W; turn S proceed 1.05 miles S or from Pasture B Exclosure II proceed 1.2 miles N. Transect 95 ft. WSW of road and 90 ft. WSW of steel rod.					
C9 Tr1	SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 16 T12N R94W	Artr-Agsm	NE	2	--	W to E
	From Pasture C-Pasture D SW cattleguard proceed 0.6 miles W on road parallel to pipeline; turn S proceed 1.75 miles SW (through cattleguard into Pasture B and past well location site into juniper type); turn W proceed 0.25 miles W on siesmagraph trail; turn S proceed 0.05 miles on siesmagraph trail. Transect 60 ft. E of road and steel post.					
C10 Tr1	SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 33 T13N R95W	Artr-Agsm	SW	0.25	--	S to N
	From Pasture D-Pasture B cattleguard on Cherokee Trail Road proceed 2.35 miles W or from turn off to Pasture B Exclosure II on the Cherokee Trail Road proceed 0.05 miles W. Transect 110 ft. N or road.					

Powder Rim Allotment - Pasture C

Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C1 Tr1	NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 14 T12N R94W	Arthr-Agsm	ENE	1.5	1	SEtoNW
	From Pasture C-Pasture D S cattleguard proceed 1.1 miles W on road parallel to pipeline or from Pasture C- Pasture D SW cattleguard proceed 0.1 mile E on road parallel to pipeline; turn SE proceed 0.85 miles SE (past windmill) turn S proceed 0.15 miles. Transect 150 ft. NE of steel post, E of road, and 80 ft. N of BLM trend plot.					
C2 Tr1	NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 32 T13N R93W	Arthr-Agsm	SSW	2	2	W to E
	From road to Pasture C Exclosure proceed 0.5 miles NW on Poison Butte Road or from Pasture C N cattleguard on Poison Butte Road proceed 0.5 miles SE; turn SW proceed 0.95 miles SW. Transect 100 ft. S of section corner marker and steel post (section corner marker and steel post are 30 ft. E of road).					
C2 Tr2	SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 29 T13N R93W	Arthr-Agsm	SSW	2.5	--	W to E
	Proceed as described for previous transect (C2 Tr1). Transect 100 ft. NNE of section corner marker and steel post (section corner marker and steel post are 30 ft. E of road) and 125 ft. SE of road.					
C3 Tr1	SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 7 T12N R93W	Arthr-Cael	SSW	1	--	W to E
	From Pasture C-Pasture D S cattleguard proceed 0.95 miles E on road parallel to pipeline or from road parallel to pipeline proceed 140 yards W from pipeline marker post where road crosses pipeline. Transect is 150 ft. N of road.					
C4 Tr1	SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 33 T13N R93W	Arthr-Stco	S	1	--	SEtoNW
	From Red Creek Bridge on Poison Butte Road proceed 1.4 miles NW or from road to Pasture C Exclosure proceed 0.25 miles SE on Poison Butte Road; turn SSE on siesmagraph trail (same siesmagraph trail runs past Pasture C Exclosure) proceed 0.6 miles SSE (past small hills to N). Transect 85 ft. W of road and steel post.					

Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C5 Tr1	SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 27 T13N R93W	Arthr-Stco	S	1.5	--	S to N
<p>From Red Creek Bridge on Poison Butte Road proceed 0.15 miles NW or from road to Pasture C Enclosure proceed 1.45 miles SE on Poison Butte Road; turn NE proceed 2.25 miles NE or from intersection of Poison Butte Road-Shell Creek Stock Trail proceed 3.05 miles E (past reservoir); turn S proceed 0.75 miles SW to Oppenhiemer West NW gate; proceed 0.65 miles SW from gate to Oppenhiemer West-Pasture C NW gate; proceed 0.15 miles SW from gate. Transect 100 ft. NW of steel post and W of road.</p>						
C6 Tr1	SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 3 T12N R93W	Arthr-Agsm	SW	4	--	ESEtoWNW
<p>From Oppenhiemer West-Pasture C cattleguard on Poison Butte Road proceed 0.75 miles NW; turn SW at fork proceed 0.7 miles SW (past well location site). Transect 70 ft. W of road.</p>						

Site No. Code	Legal Location	Vegetation Type	Exposure	Slope (Degrees)	Paired with BLM Plot No.	Transect Direction
C1 Tr1	NE¼ NW¼ Sec. 9 T12N R94W	Artr-Eula- Agsm	SW	3	2	W to E
	From Pasture C-Pasture D SW cattleguard proceed 1.8 miles W on road parallel to pipeline (also proceed 0.55 miles W on same road past well location site). Transect 175 ft. S of road and 125 ft. SSW of BLM project marker (BLM project marker is 80 ft. S of road).					
C2 Tr1	NW¼ NE¼ Sec. 3 T12N R94W	Artr-Agsm	S	4	--	W to E
	From Pasture C-Pasture D SW cattleguard proceed 1.25 miles W on road parallel to pipeline to well location site; turn N proceed 1.3 miles NE (past well location site) on road to Clay Flat Reservoir. Transect 55 ft. E of road and steel post.					
C3 Tr1	SW¼ SE¼ Sec. 31 T13N R94W	Artr-Agsm	ENE	1.5	--	N to S
	From Pasture D NE cattleguard on Cherokee Trail Road proceed 1.85 miles SW; turn S proceed 1.65 miles S and E (off rim) or from Pasture D- Pasture B cattleguard to Pasture B Exclosure I proceed 0.55 miles E; turn SE proceed 0.7 miles SE or from Pasture C-Pasture D SW cattleguard proceed 2.4 miles W on road parallel to pipeline (past East Fork Cherokee Creek); turn NW proceed 2.1 miles NW. Transect 95 ft. E of road.					
C4 Tr1	SW¼ SW¼ Sec. 24 T13N R94W	Save-Arsp	E	0.25	4	N to S
	From Shell Creek Stock Trail enter Pasture D NE gate just W of Pasture C fence line proceed 0.75 miles S; turn E proceed 0.1 mile E. Transect 105 ft. SSW of steel post, S of road, and 45 ft. W of BLM trend plot.					

APPENDIX G

Permanent browse transect site description and location within
pasture of the grazing systems study area west of Baggs, Wyoming

Appendix G

SAMPLING SITES FOR PERMANENT BROWSE TRANSECTS

Pasture	Legal Location	Exposure	Slope (Degrees)	Transect Direction
Poison Buttes	SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 35 T13N R92W	SSE	0.5- 12	NW to SE
From E cattleguard on Poison Butte Road proceed 1.5 miles SW and W to top of rim; turn N proceed 1.2 miles N along juniper ridge to end of road; turn E proceed 0.1 mile E. Transect 25 ft. S of road.				
Oppenhiemer East	SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 33 T13N R92W	S	4 - 10	N to S
From Poison Butte-Oppenhiemer East cattleguard on Poison Butte Road proceed 0.65 miles W; turn N proceed 0.15 miles N; turn NE proceed 0.4 miles NE; turn N proceed 0.95 miles N or from Poison Butte-Oppenhiemer East cattleguard on Poison Butte Road proceed 1 mile W; turn N proceed 1.45 miles N (past mine sites to juniper ridge); turn on NE fork proceed 1 mile E; turn on SE fork proceed 0.18 miles S. Transect is 30 ft. W of road.				
Oppenhiemer West	NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 36 T13N R93W	NNE	18	SW to NE
From Oppenhiemer East - Oppenhiemer West gate on juniper ridge proceed 1.95 miles W or from Oppenhiemer East-Oppenhiemer West cattleguard on Poison Butte road proceed 0.1 mile W; turn NW proceed 0.7 miles NE; take W fork proceed 0.5 miles W; turn N proceed 0.6 miles N to top of juniper ridge; turn W proceed 1 mile W. Transect is 20 ft. N of road and 125 ft. NE of steel post (steel post is S of road at road forks).				
Pasture A	SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 28 T13N R95W	NNW	5.5	N to S
From Pasture D-Pasture B cattleguard on Cherokee Trail Road proceed 2.8 miles W; turn NW proceed 0.7 miles N (through Pasture A gate); turn W on trail proceed 0.3 miles W. Transect is 10 ft. S of trail.				

Appendix G

Pasture	Legal Location	Exposure	Slope (Degrees)	Transect Direction
Pasture B	NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 15 T12N R94W	SE	7	NW to SE
	From Pasture C-Pasture D SW cattleguard proceed 0.6 miles W on road parallel to pipeline; turn S proceed 1.3 miles SW (through cattleguard into Pasture B and past well location site into juniper type); turn E proceed 0.2 miles NE. Transect is 50 ft. S of road beside small juniper tree; 95 ft. SW of sand cement survey marker which is S and next to road, and 80 ft. SSE of sand cement marker which is 35 ft. N of road.			
Pasture C	SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 7 T12N R93W	SSW	9	NE to SW
	From Pasture C-Pasture D S cattleguard proceed 1.7 miles E on road parallel to pipeline or from gas line marker past where road crosses pipeline on rim above Sand Creek proceed 0.75 miles W. Transect is 30 ft. S of road.			
Pasture D	NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 11 T12N R94W	ENE	7.5	NE to SW
	From Pasture C-Pasture D SW cattleguard proceed 0.25 miles E or from Pasture C-Pasture D S cattleguard proceed 1.05 miles W on road parallel to pipeline; turn N proceed 0.25 miles N (through cattleguard into Pasture D). Transect is 35 ft. W of road.			

APPENDIX H

Precipitation records from gauges at the eight exclosures in the grazing systems study areas for the years 1972 through 1979 for winter, spring, summer, and fall periods.

Appendix H

TABLE 1. 1971 - 1972 Precipitation Records

Rain Gauge Number		Apr. 15 1972	July 1 1972	Sept. 1 1972	Oct. 15 1972	Total Oct. 1971 Oct. 1972	Average Oct. 1967 Oct. 1972
124	Poison Buttes Exc. I	5.55	S 4.60	S .50	1.12	11.77	11.15
125	Poison Buttes Exc. II	S 3.90	S 2.25	.60	1.77	8.52	11.24
128	Oppenheimer Exc.	S 5.00	S 4.46	S .60	1.28	11.34	10.40
130	Powder Rim C Exc.	3.89	1.68	.49	1.30	7.36	8.45
131	Powder Rim D Exc.	3.60	1.67	.60	1.07	6.94	8.18
136	Powder Rim B Exc. I	4.28	1.84	.80	1.10	8.02	9.05
137	Powder Rim B Exc. II	5.58	2.54	.59	1.28	9.99	11.52
139	Powder Rim A Exc.	4.36	S 3.90	S .90	1.19	10.35	9.93
AVERAGE		4.52	2.87	.64	1.26	9.29	9.99

S = Precipitation from multiple periods separated by estimate

Appendix H

TABLE 2. 1972 - 1973 Precipitation Records

Rain Gauge Number		Apr. 15 1973	July 1 1973	Sept. 1 1973	Oct. 15 1973	Total Oct. 1974 Oct. 1973	Average Oct. 1967 Oct. 1973
124	Poison Buttes Exc. I	5.49	1.49	1.50	.70	9.18	11.13
125	Poison Buttes Exc. II	8.38	1.40	1.18	.78	11.74	11.03
128	Oppenhiemer Exc.	5.33	1.33	1.62	.79	9.07	10.15
130	Powder Rim C Exc.	3.75	1.69	1.80	.69	7.93	8.62
131	Powder Rim D Exc.	3.28	1.60	.92	.68	6.48	7.83
136	Powder Rim B Exc. I	4.27	1.95	1.15	.77	8.14	9.01
137	Powder Rim B Exc. II	6.85	1.97	1.43	.98	11.23	11.08
139	Powder Rim A Exc.	3.54	1.06	.74	.67	6.01	9.50
AVERAGE		5.11	1.56	1.29	.76	8.72	9.79

Appendix H

TABLE 3. 1972 - 1973 Precipitation Records

Rain Gauge Number		Apr. 15 1973	July 1 1973	Sept. 1 1973	Oct. 15 1973	Total Oct. 1972 Oct. 1973	Average Oct. 1967 Oct. 1973
124	Poison Buttes Exc. I	S 4.70	DR	S 7.50	.80	13.00	11.46
125	Poison Buttes Exc. II	S 4.90	DR	S 3.63	.75	9.28	10.91
128	Oppenhiemer Exc.	S 4.50	DR	S 4.79	.68	9.97	10.33
130	Powder Rim C Exc.	S 4.75	DR	S 4.70	.76	10.21	8.74
131	Powder Rim D Exc.	3.35	DR	2.86	1.05	7.26	8.06
136	Powder Rim B Exc. I	D 5.00	DR	3.02	1.65	E 9.67	9.15
137	Powder Rim B Exc. II	5.15	DR	2.12	1.45	8.72	11.05
139	Powder Rim A Exc.	6.45	DR	3.09	1.29	10.83	10.08
AVERAGE		4.85	DR+S	3.96	1.05	9.86	9.97

S = Precipitation from multiple periods separated by estimate

DR = Delayed Reading

E = Estimated Reading

Appendix H

TABLE 4. 1974 - 1975 Precipitation Records

Rain Gauge Number		Apr. 15 1975	July 1 1975	Sept. 1 1975	Oct. 15 1975	Total Oct. 1974 Oct. 1975	Average Oct. 1967 Oct. 1975
124	Poison Buttes Exc. I	5.43	2.53	S 1.30	5.74	10.00	10.99
125	Poison Buttes Exc. II	6.72	2.53	1.64	0.59	11.48	11.09
128	Oppenhiemer Exc.	5.08	2.38	0.85	0.55	8.86	9.99
130	Powder Rim C Exc.	3.88	2.52	1.09	0.51	8.00	8.54
131	Powder Rim D Exc.	3.63	2.63	0.94	0.92	8.12	7.87
136	Powder Rim B Exc. I	3.95	E2.46	1.21	0.81	8.43	8.94
137	Powder Rim B Exc. II	5.01	3.39	0.49	0.85	9.74	10.91
139	Powder Rim A Exc.	3.54	3.29	1.46	0.90	9.19	9.46
AVERAGE		4.66	2.72	1.12	.73	9.23	9.72

S = Precipitation from multiple periods separated by estimate

E = Estimated reading

Appendix H

TABLE 5. 1975 - 1976 Precipitation Records

Rain Gauge Number		Apr. 15 1976	July 1 1976	Sept. 1 1976	Oct. 15 1976	Total Oct. 1975 Oct. 1976	Average Oct. 1967 Oct. 1976
124	Poison Buttes Exc. I	3.92	3.34	.88	.65	8.79	10.74
125	Poison Buttes Exc. II	4.85	3.34	.79	.70	9.68	10.92
128	Oppenhiemer Exc.	3.69	3.22	.69	.57	8.17	9.79
130	Powder Rim C Exc.	2.71	3.83	.23	.77	7.54	8.43
131	Powder Rim D Exc.	2.36	3.93	.33	.55	7.17	7.79
136	Powder Rim B Exc. I	E2.75	3.44	.86	.46	E7.51	8.78
137	Powder Rim B Exc. II	4.83	3.43	.80	.54	9.60	10.76
139	Powder Rim A Exc.	3.18	3.92	.86	.47	8.43	9.34
AVERAGE		E3.54	3.56	.68	.59	E8.36	9.57

E = Estimated Reading

Appendix H

TABLE 6. 1976 - 1977 Precipitation Records

Rain Gauge Number		Apr. 15 1977	July 1 1977	Sept. 1 1977	Oct. 15 1977	Total Oct. 1976 Oct. 1977	Average Oct. 1967 Oct. 1977
124	Poison Buttes Exc. I	1.78	1.70	4.77	.60	8.85	10.55
125	Poison Buttes Exc. II	2.42	1.71	3.84	.48	8.45	10.67
128	Oppenhiemer Exc.	1.66	1.78	2.75	.40	6.59	9.47
130	Powder Rim C Exc.	1.54	1.27	3.17	.38	6.36	8.22
131	Powder Rim D Exc.	1.18	1.22	2.20	.42	5.02	7.51
136	Powder rim B Exc. I	1.95	.83	2.50	.39	5.67	8.47
137	Powder Rim B Exc. II	2.56	1.03	2.70	.40	6.69	10.35
139	Powder Rim A Exc.	1.39	.93	2.10	.50	4.92	8.90
AVERAGE		1.81	1.31	3.00	.45	6.57	9.27

Appendix H

TABLE 7. 1977 - 1978 Precipitation Records

Rain Gauge Number		Apr. 15 1978	July 1 1978	Sept. 1 1978	Oct. 15 1978	Total Oct. 1977 Oct. 1978	Average Oct. 1967 Oct. 1978
124	Poison Buttes Exc. I	5.90	2.02	2.24	2.15	12.31	10.71
125	Poison Buttes Exc. II	6.86	1.95	2.48	1.07	12.36	10.82
128	Oppenheimer Exc.	5.19	1.75	2.17	2.04	11.15	9.62
130	Powder Rim C Exc.	4.58	1.30	1.81	1.68	9.37	8.32
131	Powder Rim D Exc.	3.86	1.66	1.54	1.38	8.44	7.59
136	Powder Rim B Exc. I	4.21	2.25	1.82	1.40	9.68	8.58
137	Powder Rim B Exc. II	4.76	1.64	1.44	1.23	9.07	10.23
139	Powder Rim A Exc.	4.50	2.28	2.04	1.46	10.28	9.02
AVERAGE		4.98	1.86	1.94	1.55	10.33	9.36

Appendix H

TABLE 8. 1978 - 1979 Precipitation Records

Rain Gauge Number		Apr. 15 1979	July 1 1979	Sept. 1 1979	Oct. 15 1979	Total Oct. 1978 Oct. 1979	Average Oct. 1967 Oct. 1979
124	Poison Buttes Exc. I	3.87	2.20	1.54	2.55	10.16	10.66
125	Poison Buttes Exc. II	5.12	2.32	1.72	3.05	12.21	10.94
128	Oppenheimer Exc.	3.56	2.00	1.14	2.65	9.35	9.60
130	Powder Rim C Exc.	3.16	1.44	1.01	2.38	7.99	8.29
131	Powder Rim D Exc.	2.40	1.26	1.13	2.27	7.06	7.54
136	Powder Rim B Exc. I	2.80	1.09	1.64	2.05	7.58	8.50
137	Powder Rim B Exc. II	5.10	1.06	1.83	2.45	10.44	10.25
139	Powder Rim A Exc.	5.30	1.52	1.64	2.17	10.63	9.15
AVERAGE		3.91	1.61	1.46	2.45	9.43	9.37

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